

HU: MGSDVRDLNALLPAVPSLGGGGGCPVSGAAQWAPVLDFAAPPASAYGSL
MO: MGSDVRDLNALLPAVSSLGGGGGCPVSGAAQWAPVLDFAAPPASAYGSL

HU: GGPAPPPAPPPPPPPHSFIKQEPSWGAEPHEEQCLSAFTVHFSGQFTGTAG
MO: GGPAPPPAPPPPPPPHSFIKQEPSWGAEPHEEQCLSAFTLHFSGQFTGTAG

HU: ACRYGPFPPPPSQASSGQARMFPNAPYLPSCLESQPAIRNQYSTVTFDGTGS
MO: ACRYGPFPPPPSQASSGQARMFPNAPYLPSCLESQPTIRNQYSTVTFDGAPS

HU: YGHTPSHHAAQFPNHSFKHEDPMGQQGSLGEQQYSVPPPVYGCHTPTDSCTG
MO: YGHTPSHHAAQFPNHSFKHEDPMGQQGSLGEQQYSVPPPVYGCHTPTDSCTG

HU: SQALLLRTPYSSDNLYQMTSQLCMTWNQMNLGATLKGVAAGSSSSVKWTE
MO: SQALLLRTPYSSDNLYQMTSQLCMTWNQMNLGATLKGMAAGSSSSVKWTE

HU: GQSNHSTGYESDNHTTPILCGAQYRIHTGVFRGIQDVRVPGVAPTLVRSAS
MO: GQSNHGIGYESDNHTAPILCGAQYRIHTGVFRGIQDVRVSGVAPTLVRSAS

HU: ETSEKRPFMCAYPGCNKRYFKLSHLQMHSRKHTGEKPYQCDKDCERRFSR
MO: ETSEKRPFMCAYPGCNKRYFKLSHLQMHSRKHTGEKPYQCDKDCERRFSR

HU: SDQLKRHQRHTGVKPFQCKTCQKFSRSDHLKTHTRTHTGKTSEKPFSCR
MO: SDQLKRHQRHTGVKPFQCKTCQKFSRSDHLKTHTRTHTGKTSEKPFSCR

HU: WPSCQKKFARSDELVRHHNMHQRNMTKLQLAL
MO: WHSCQKKFARSDELVRHHNMHQRNMTKLHVAL

Fig. 1

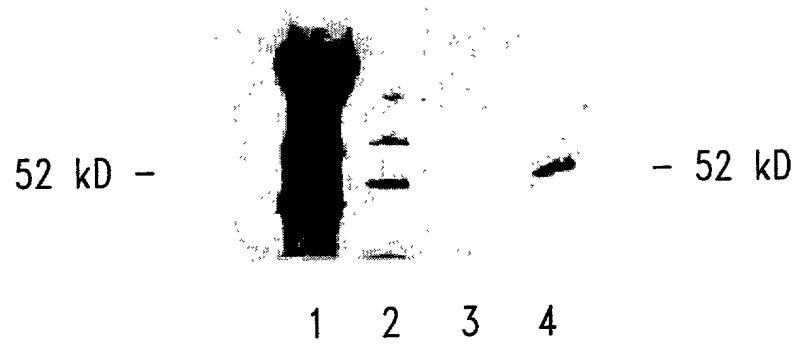


Fig. 2

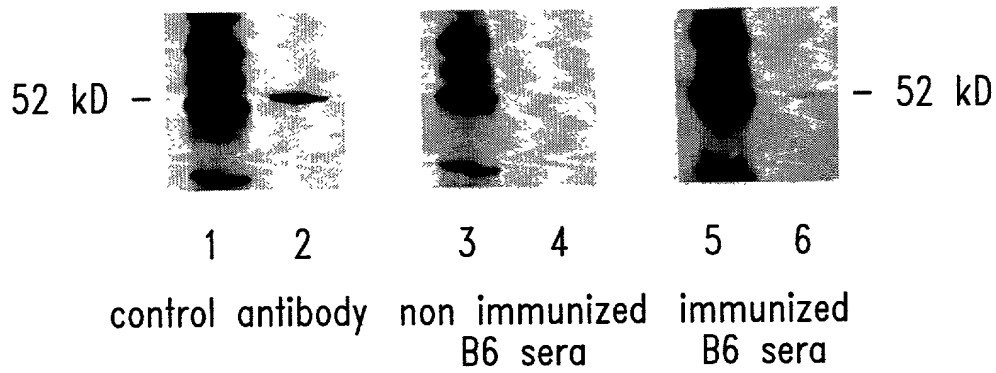


Fig. 3

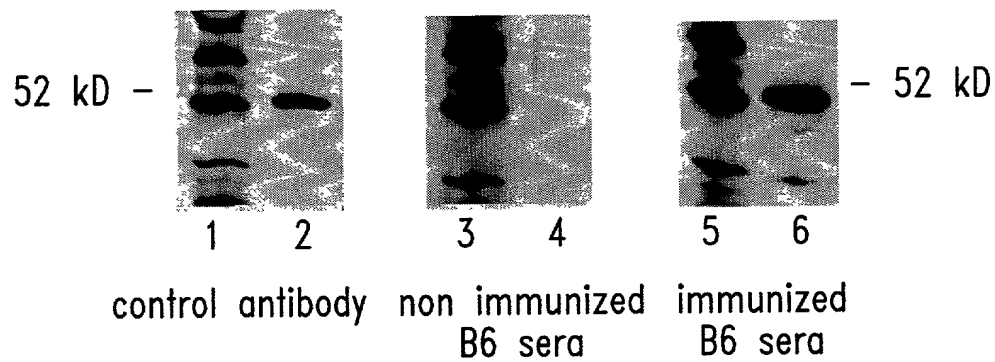


Fig. 4

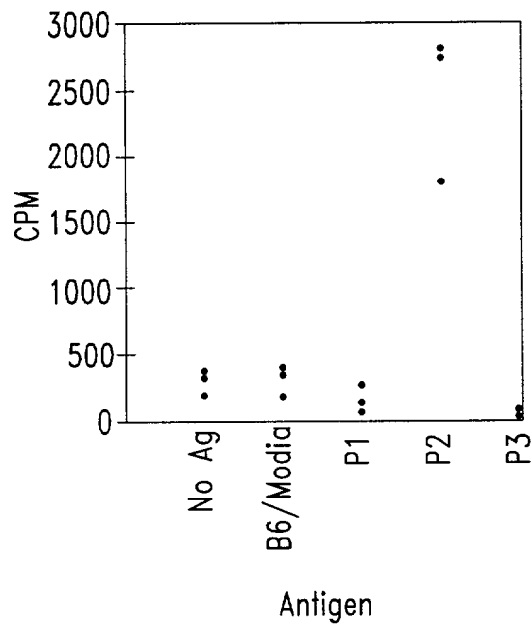


Fig. 5A

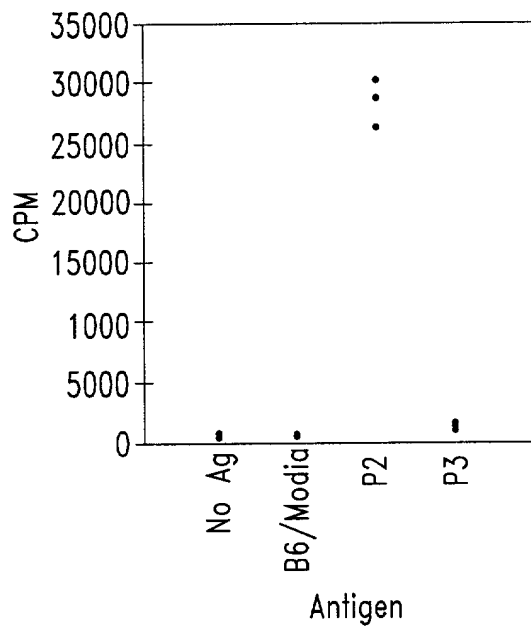


Fig. 5B

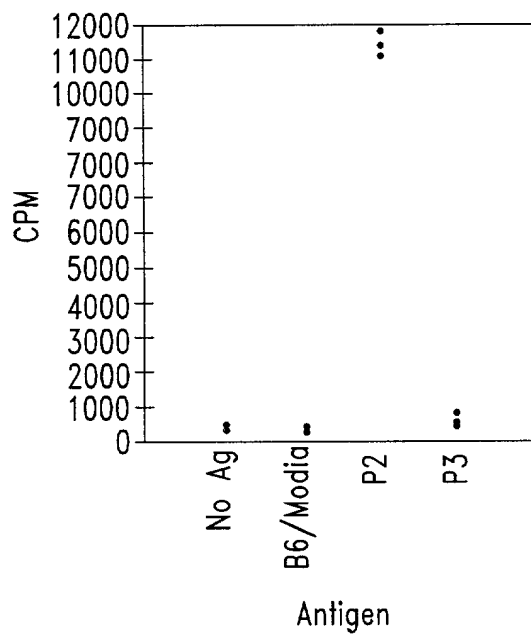


Fig. 5C

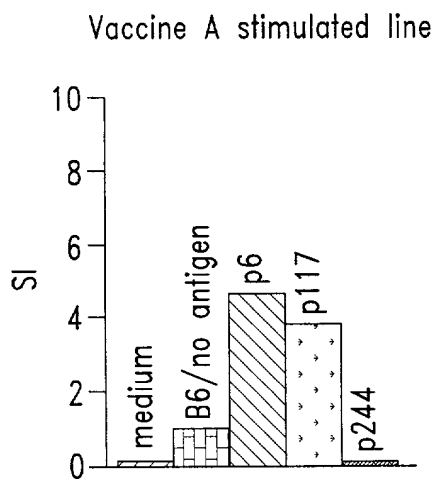


Fig. 6A

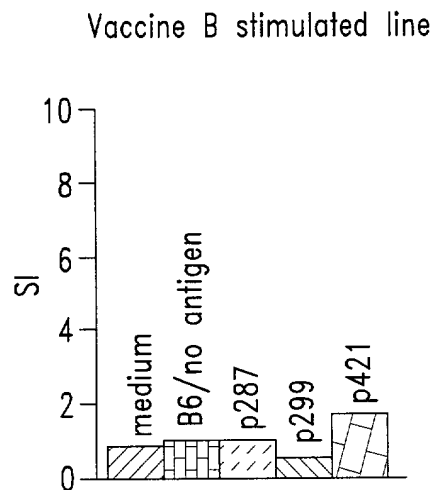


Fig. 6B

p117-139 stimulated line

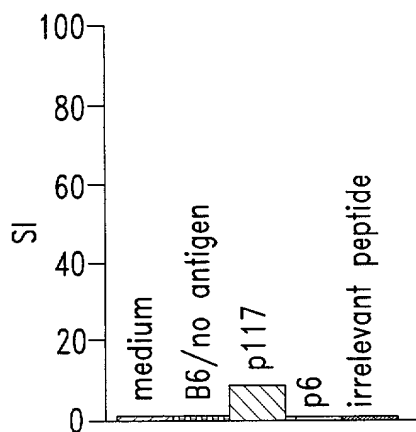


Fig. 7A

p117-139 stimulated clone

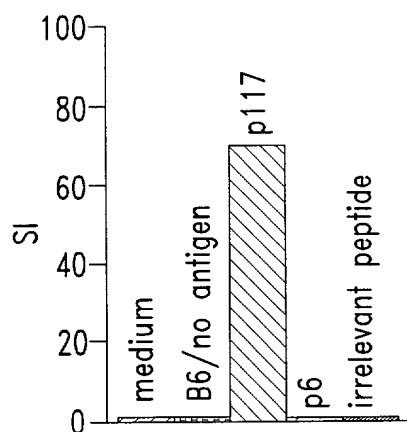


Fig. 7B

p6-22 stimulated line

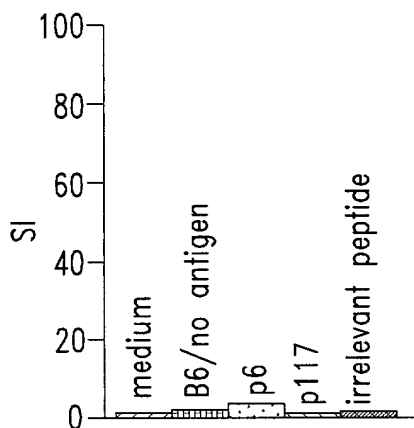


Fig. 7C

p6-22 stimulated clone

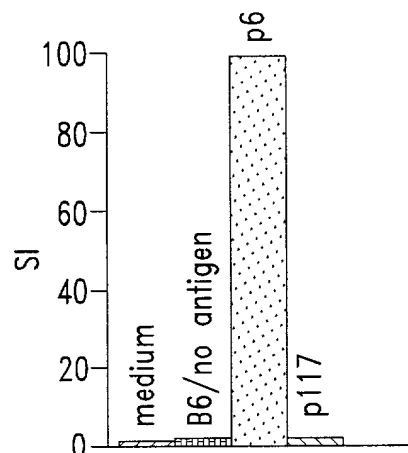


Fig. 7D

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....AAAAAAAAAAAAAAAA.....AAAAA.....AAAAAAAAAAAA.....
.....RRRR.....
.....
.....

80  85  90  95  100 105 110 115 120 125 130 135 140 145 150
PSWGGAEPEEQCLSAFTVHFSGQFTGTAGACRYGPFPPPSQASSGQARMFPNAPYLPSCLESQPAIRNQYS
.....AAA.....AAAA.....AAA.....AAAAA.....
.....RRRR.....RRRR.....
.....DDDDDDDD.....
.....

155 160 165 170 175 180 185 190 195 200 205 210 215 220 225
TVTFDGTSPYGHTPSHAAQPNHSFKHEDPMGQQGSLGEQQYSVPPVYGCHTPTDCTGSQALLRTPYSSDN
.....AAAA.....AAAAA.....AA
.....RRRR.....
.....DDDDDDDDDDDD.....
.....

230 235 240 245 250 255 260 265 270 275 280 285 290 295 300
LYQMTSQLECMTNQMNLGATLKGVAAGSSSVKWTGQSNHSTGYESDNHTTILCGAQYRIHTGCVFRGIQDV
AAAAAA.....AAA.AAA.....AAAAAAAAA
.....RRRRRRRRRR.....RRRR.....RRRR.....
DDDDDD.....DDDDDDDDDD.....
.....dddd.....

305 310 315 320 325 330 335 340 345 350 355 360 365 370 375
RRVPGVAPTLVRSASETSEKRPFCAYPGCNKRYFKLSHLQMHSRKHTGEKPYQCDKDCERRFSRSDQLKRHR
AAAAA.AAAAAAAAAA.....AAAA.AAAAAAA.
.....RRRR.....RRRR.....
.....DDDDDD.....
.....

380 385 390 395 400 405 410 415 420 425 430 435 440 445 450
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.....AAAA.AAAA.AA.....AAAA.....AAA.....AAAAAA.....AAA.....
.....RRRR.....RRRR.....
.....
.....dddddddddd.....
    
```

Fig. 8A


```

5   10  15  20  25  30  35  40  45  50  55  60  65  70  75
MGSDVRDLNALLPAVSSLGGGGGCGLPVSGAAQWAPVLDFAAPPASAYGSLGGPAPPAPPPPPPPPHSFIKQE
.....AAAAAAAAAAAAAAAA.....AAAAA.....AAAAAAAAAAAA.....
.....RRRR.....
.....
.....

80  85  90  95  100 105 110 115 120 125 130 135 140 145 150
PSWGGAEPEEQCLSAFTLHFSGQFTGTAGACRYGPFPPPPSQASSGQARMFPNAPYLPSCLESQPTIRNQGS
.....AAAA.....AAA.....AAAAA.....
.....RRRR.....RRRR.....
.....DDDDDDDD.....
.....

155 160 165 170 175 180 185 190 195 200 205 210 215 220 225
TVTFDGAPSYGHTPSHAAQFPNHSFKHEDPMGQQGSLGEQQYSVPPVYGCHTPTDCTGSQALLRTPYSSDN
.....AAAA.....AAAAA.....AA
.....RRRR.....
.....DDDDDDDDDDDD.....
.....

230 235 240 245 250 255 260 265 270 275 280 285 290 295 300
LYQMTSQLECMTNQMNLGATLKGMAAGSSSVKWTGQSNHGIGYESDNHTAPILCGAQYRIHTGVFRGIQDV
AAAAA.....AAA.AAA.....AAAAAAAAA
.....RRRRRRRRR.....RRRR.....RRRR.....
DDDDDD.....DDDDDDDDDD.....
.....dddd.....

305 310 315 320 325 330 335 340 345 350 355 360 365 370 375
RRVSGVAPTLVRSASETSEKRPFCAYPGCNKRYFKLSHLQMHSRKHTGEKPYQCDKDCERRFSRSDQLKRHR
AAAAA.....AAAAA.....AAAA.AAAAAA.
.....RRRRR.....RRRR.....
.....DDDDDDDDDD.....
.....

380 385 390 395 400 405 410 415 420 425 430 435 440 445 450
RHTGVKPFQCKTCQRKFSRDLKTHTRTHGTSEKPFSCRWHSQKKFARSDLVRRHNMHQNMNTKLHVAL
.....AAAA.AAAA.AA.....AAAA.....AA.....AAAAA.....AAAA.....
.....RRRR.RRRR.....
.....
.....dddddddddd.....
    
```

Fig. 8B

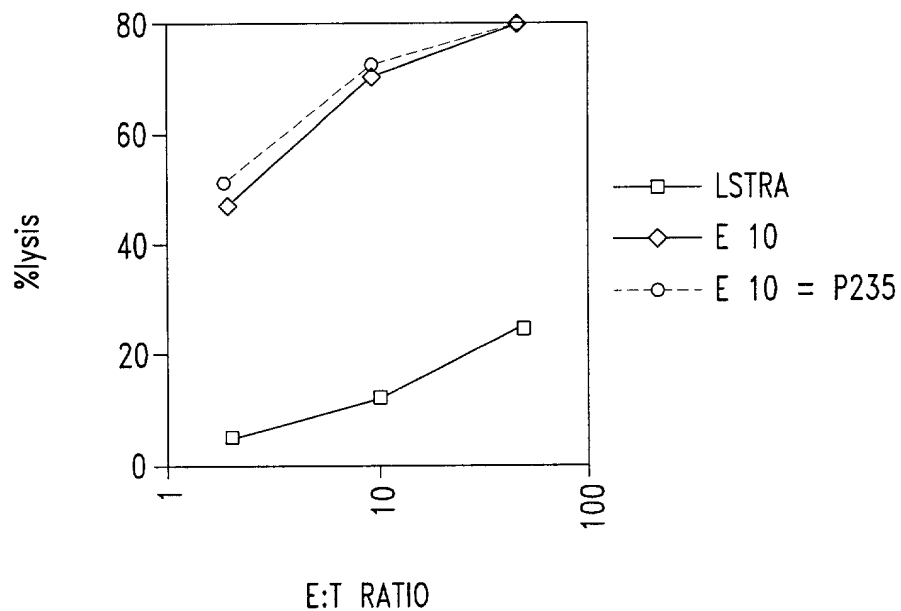


Fig. 9A

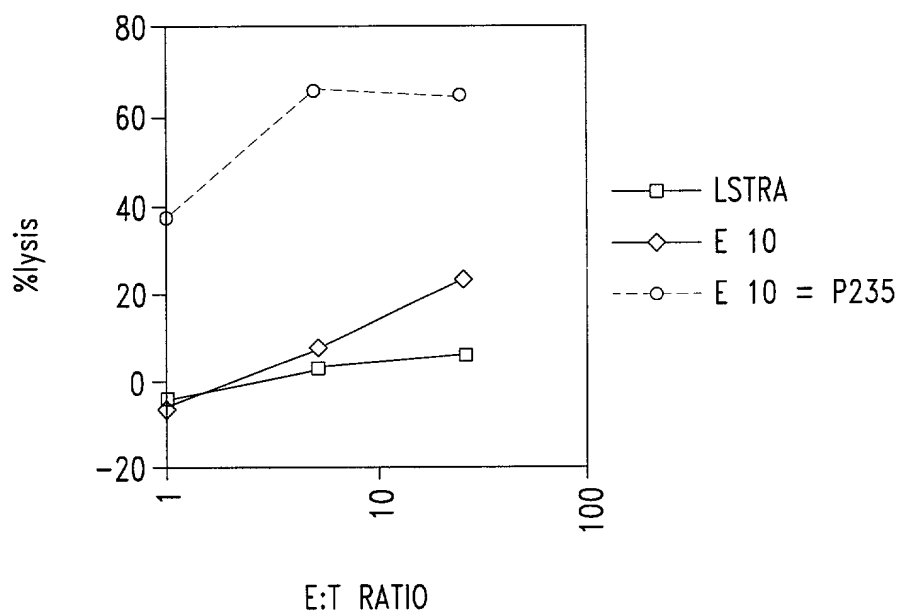


Fig. 9B

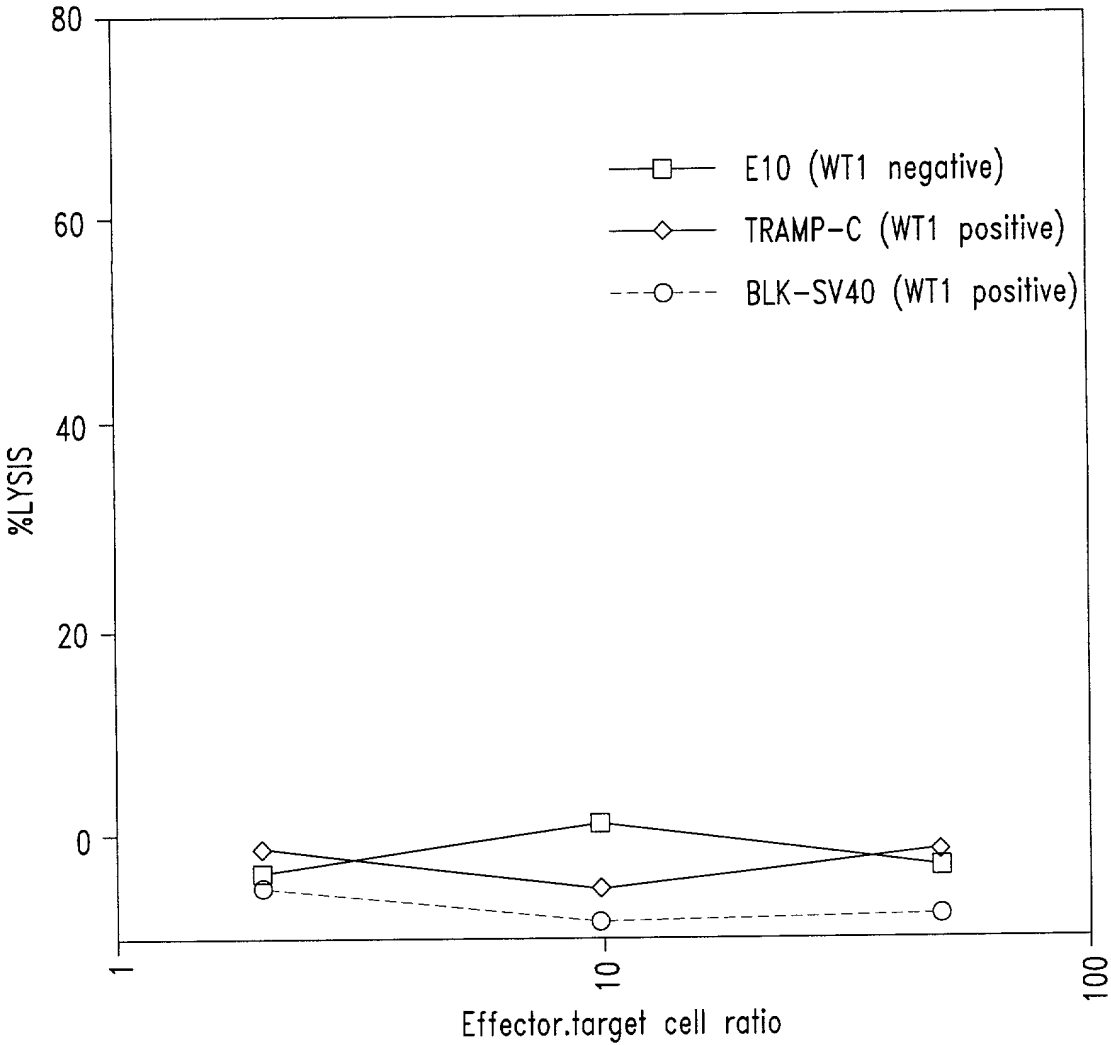


Fig. 10A

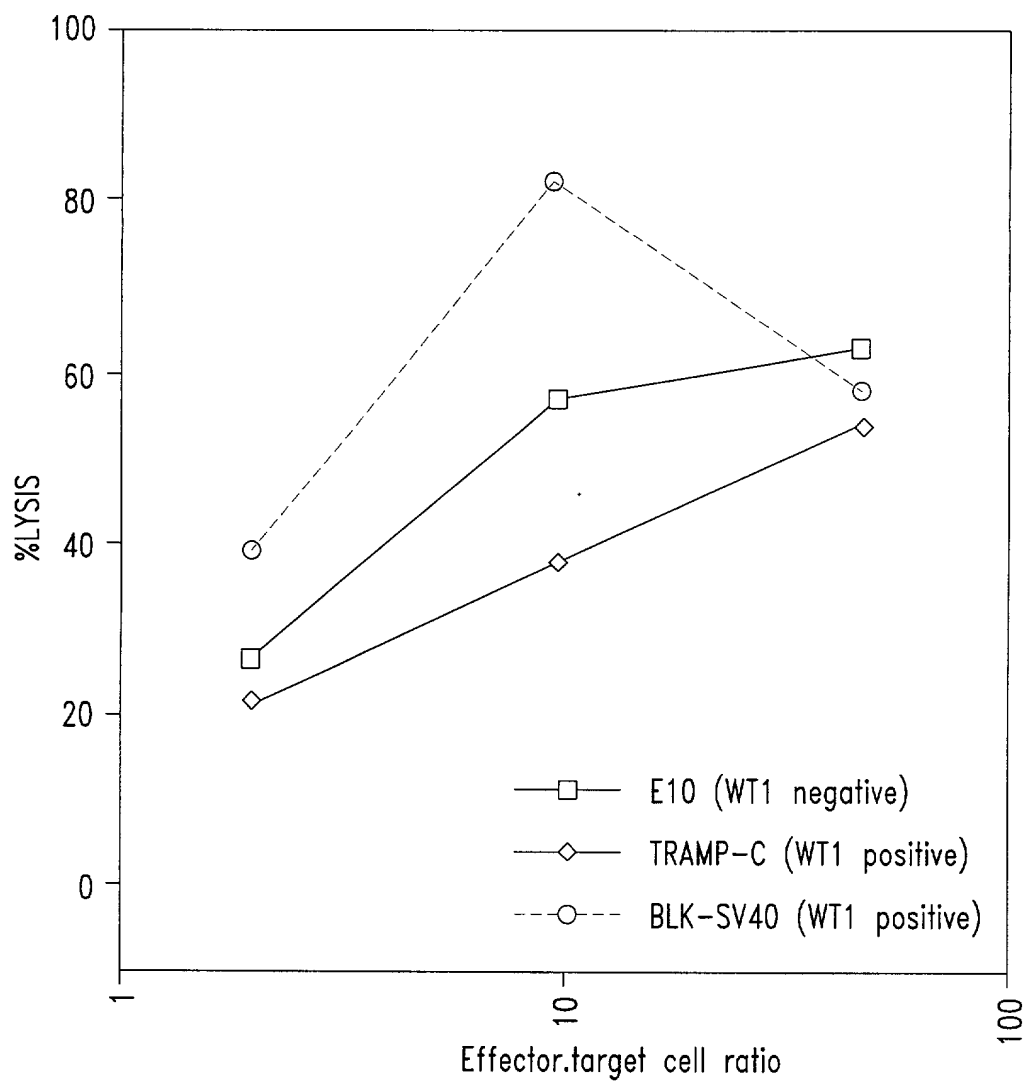
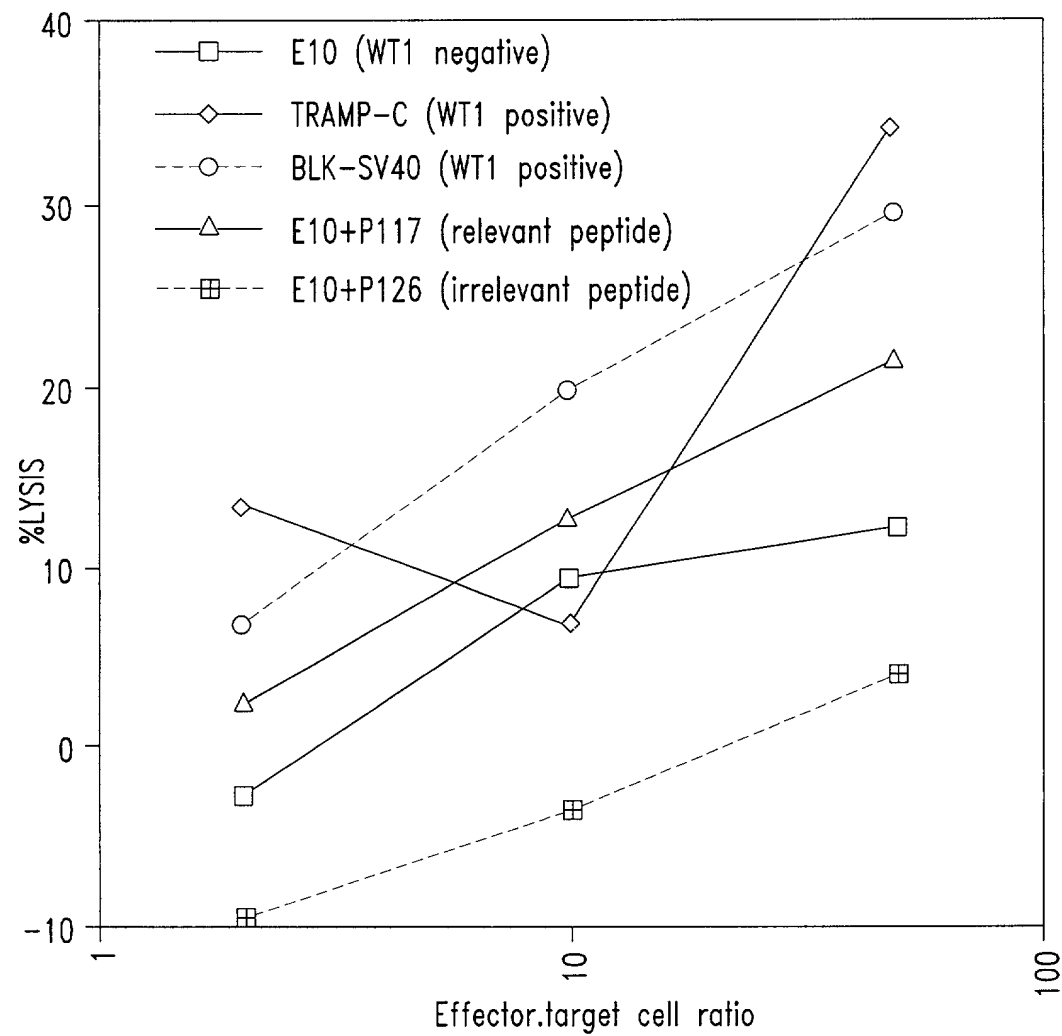


Fig. 10B

*Fig. 10C*

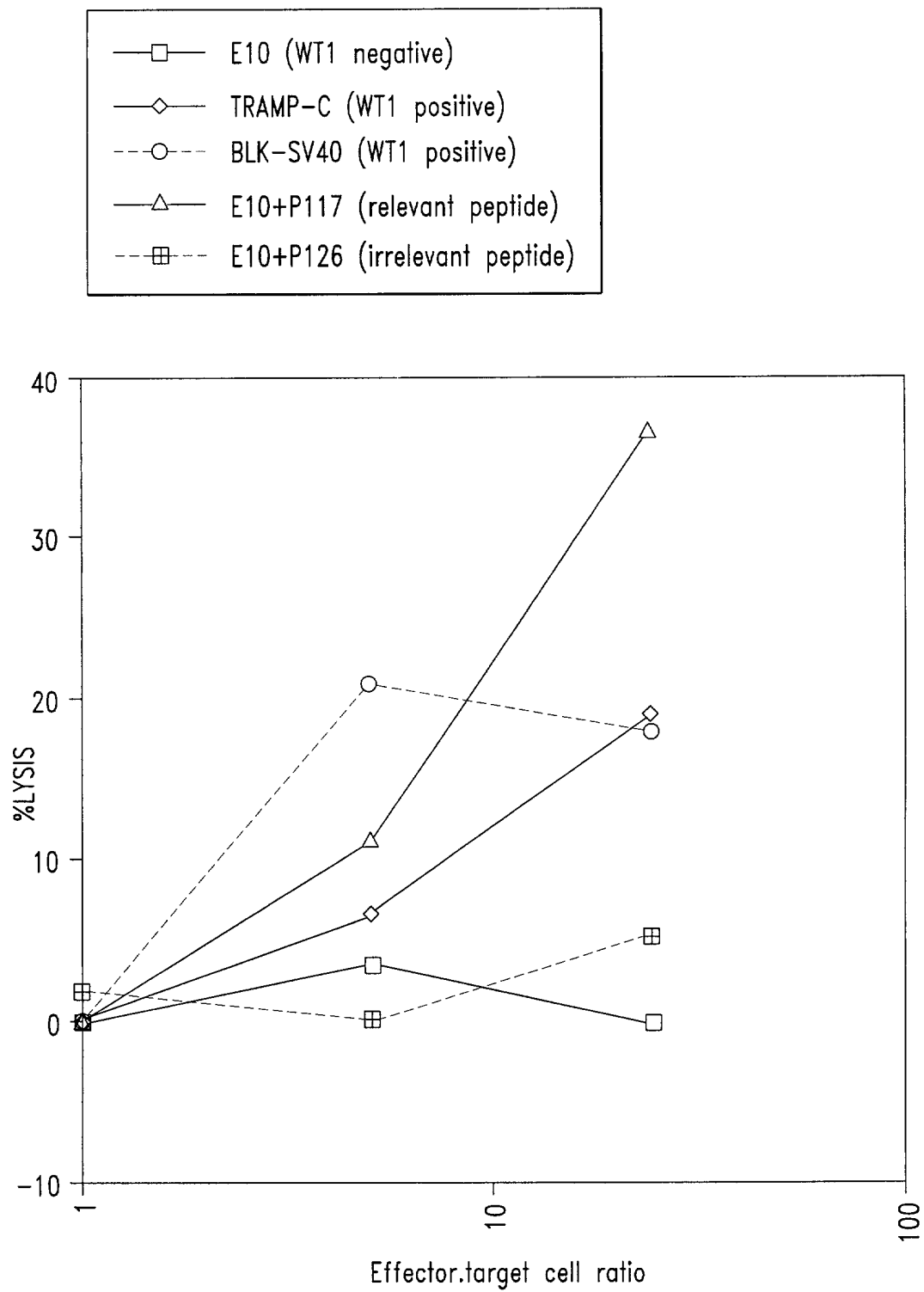


Fig. 10D

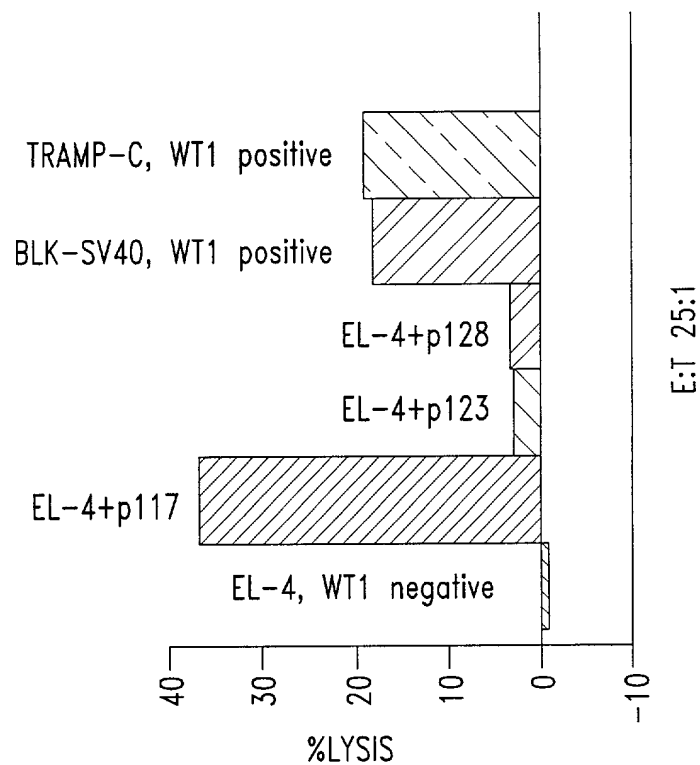


Fig. 11B

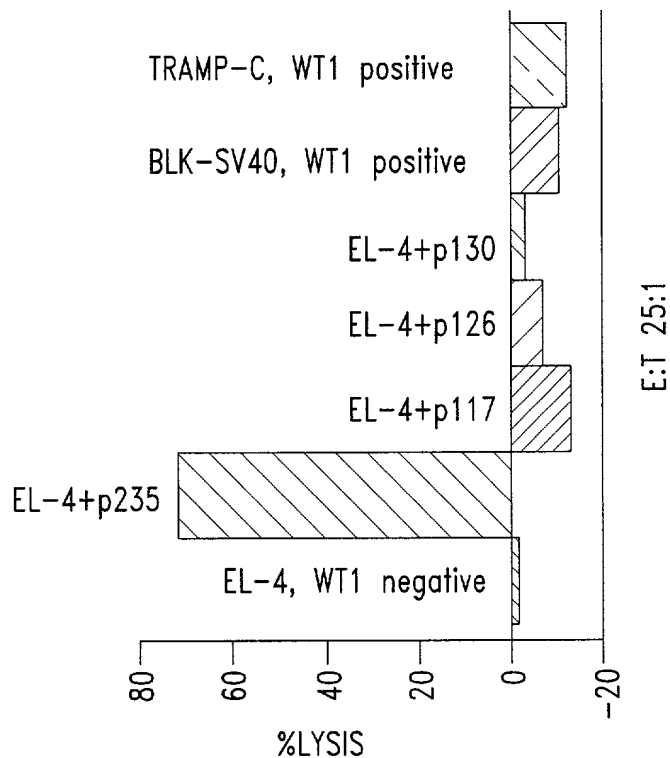
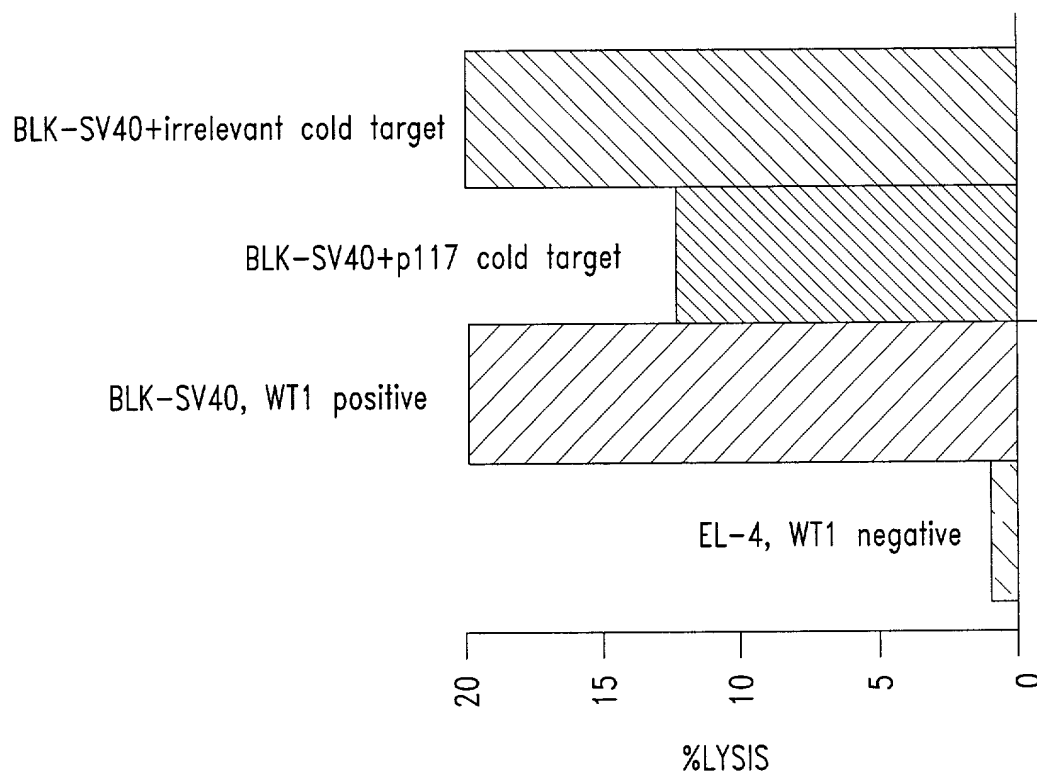
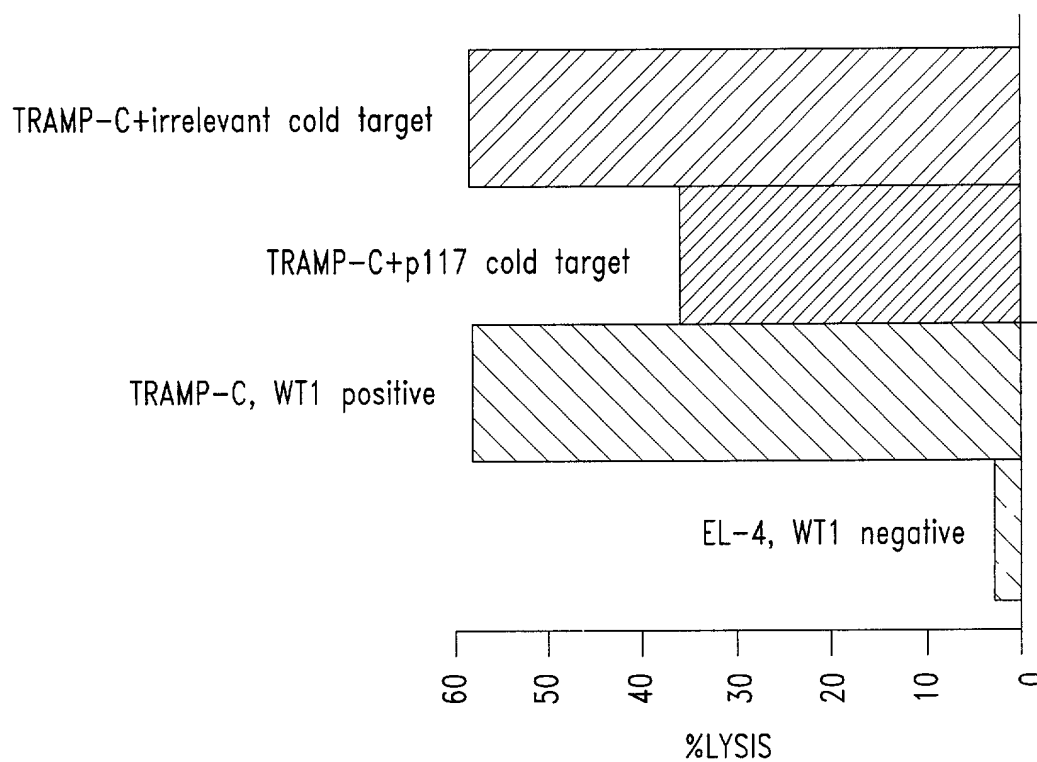


Fig. 11A



E:T 25:1

Fig. 12B



E:T 25:1

Fig. 12A

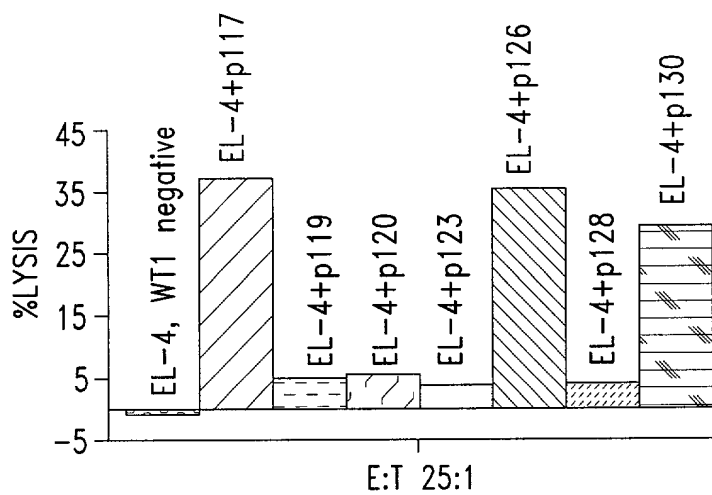


Fig. 13A

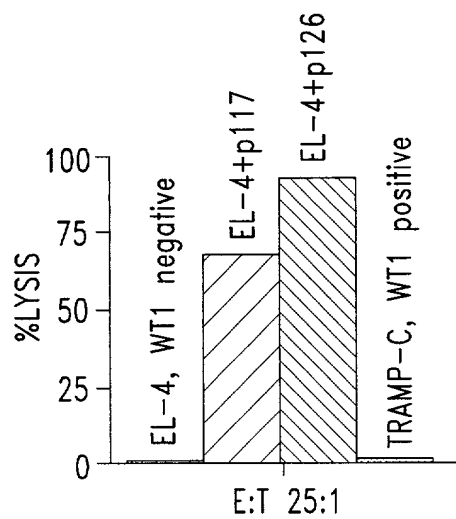


Fig. 13B

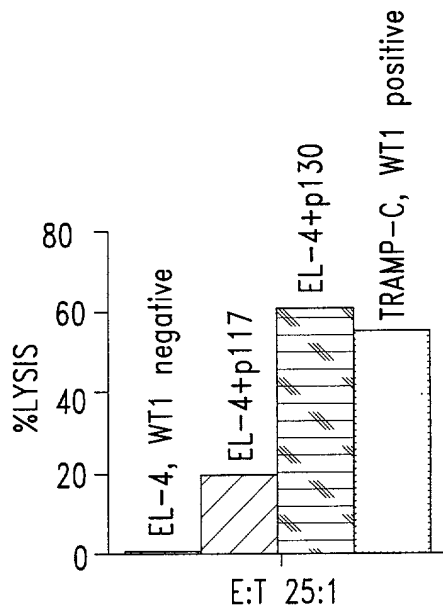


Fig. 13C

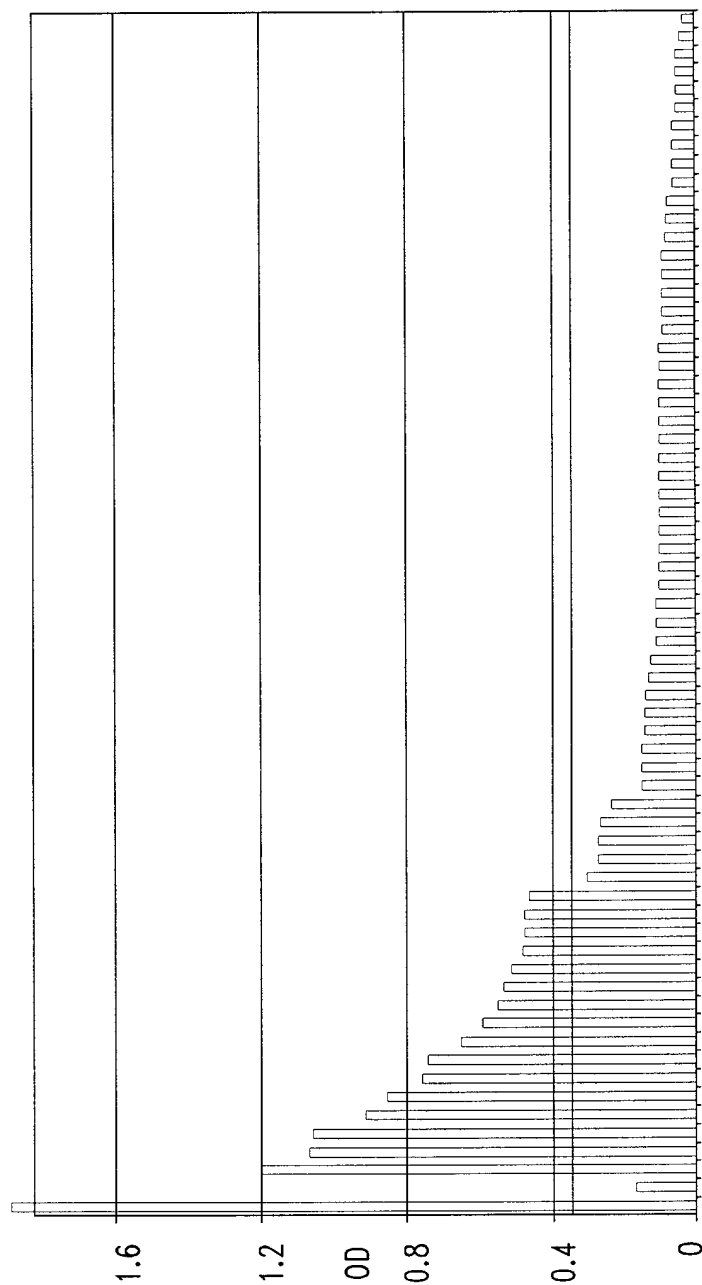


Fig. 14

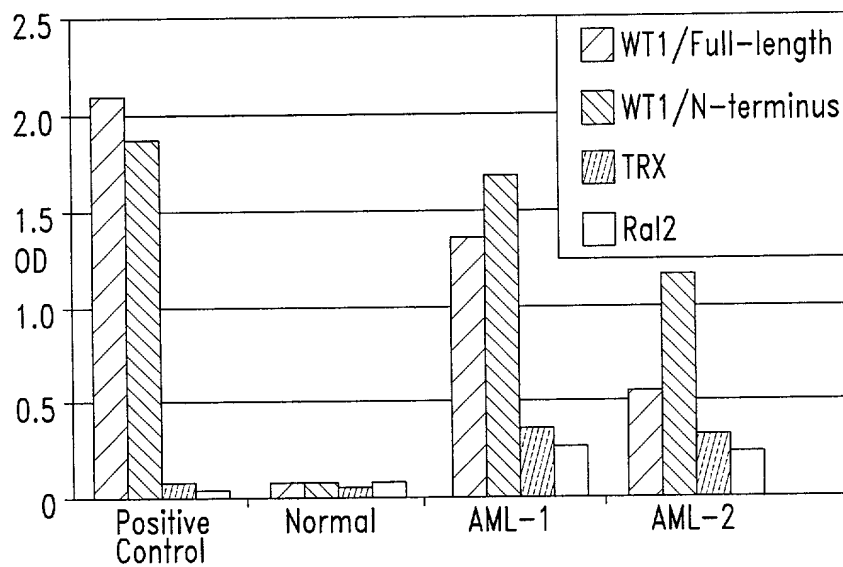


Fig. 15

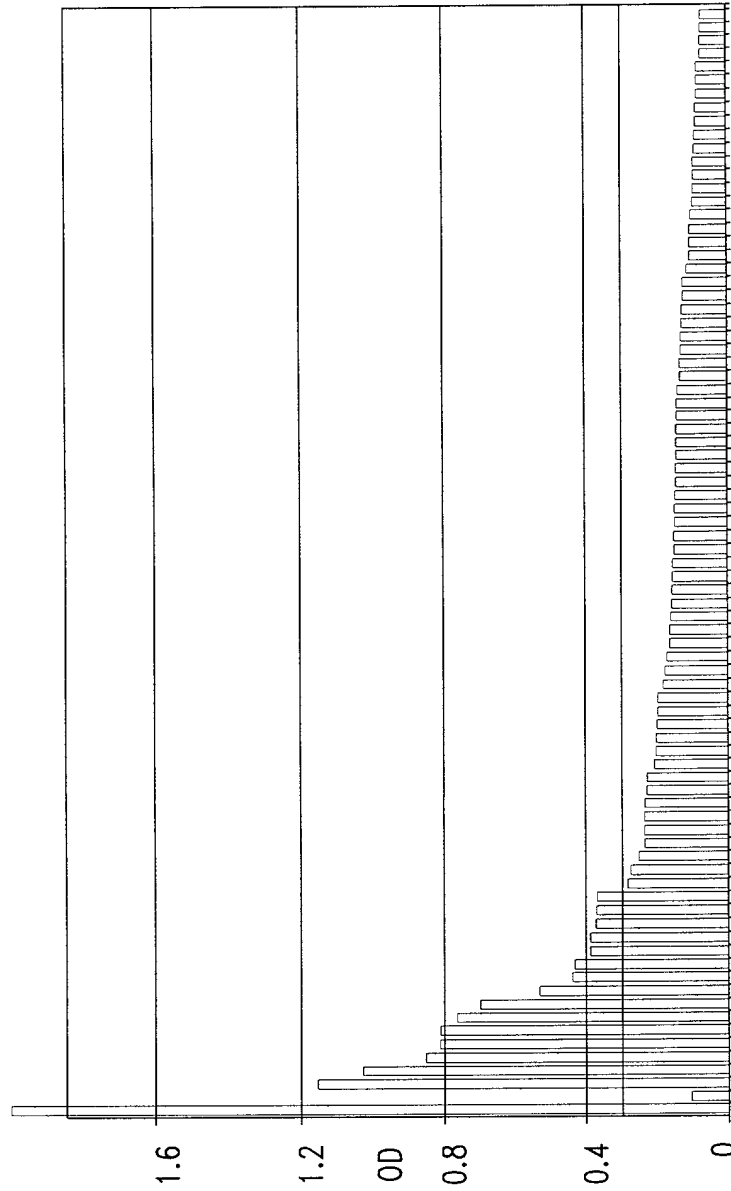


Fig. 16

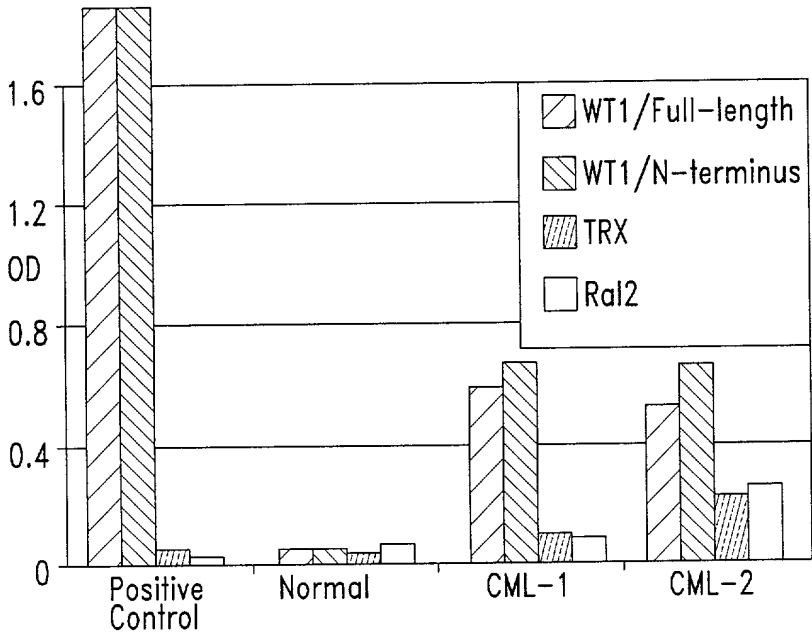


Fig. 17

FIG. 18

TABLE 1: Characteristics of Recombinant WT1 Proteins Used for Serological Analysis

<u>NAME</u>	<u>Recombinant Protein</u>	<u>WT1 Amino Acid Position</u>	<u>Molecular Weight</u>
WT1/full-length	Ral2-WT1 full length fusion protein	aa 1-449	85kDa
WT1/N-terminus	TRX-WT1 N-terminus fusion protein	aa 1-249	60kDa
WT1/C-terminus	WT1 C-terminus protein	aa 267-449	50kDa

Fig. 18

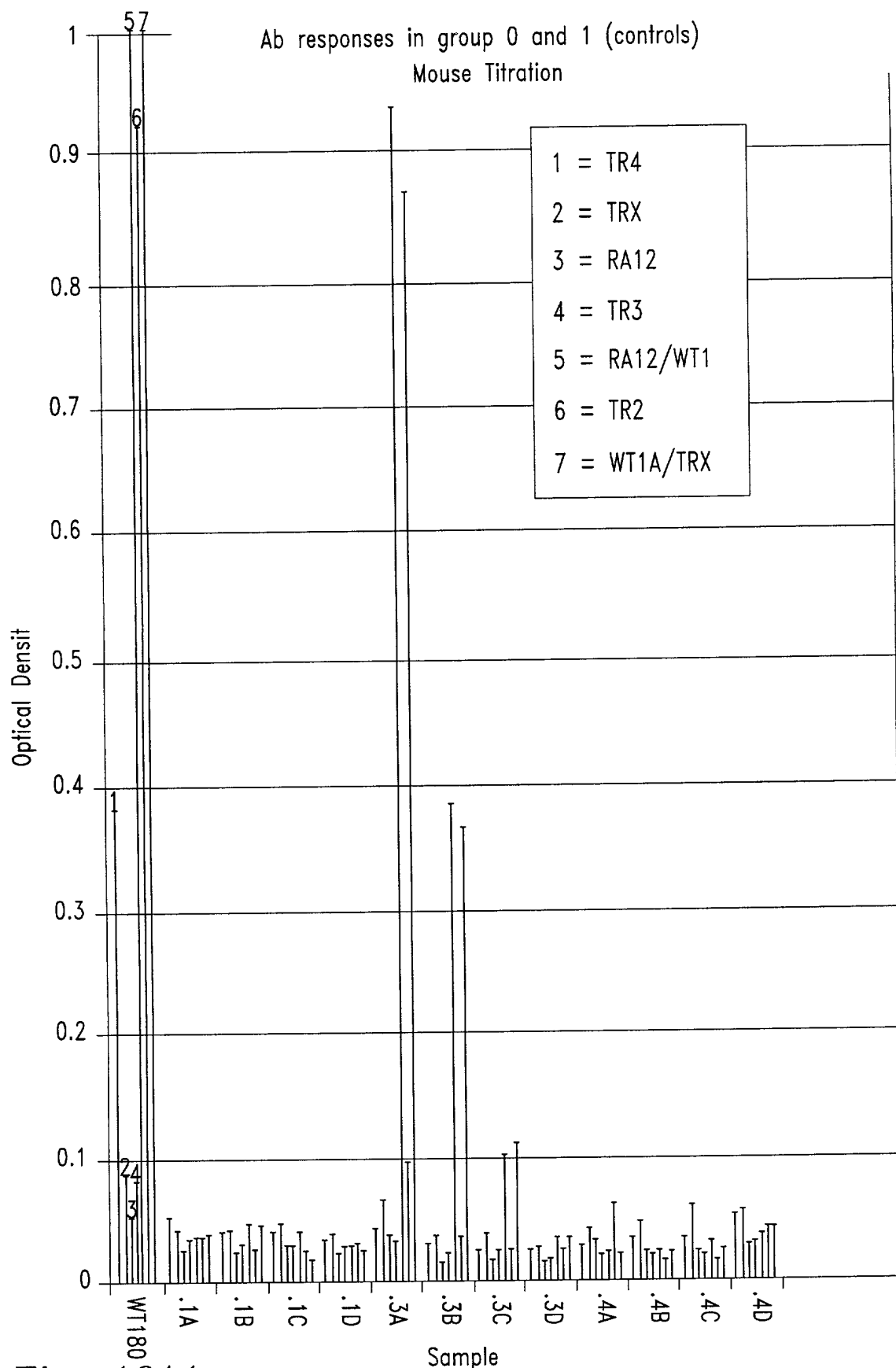


Fig. 19A1

Control groups. A: 1:500 Dilution, B: 1:2000, C: 1:8000, D: 1:16000

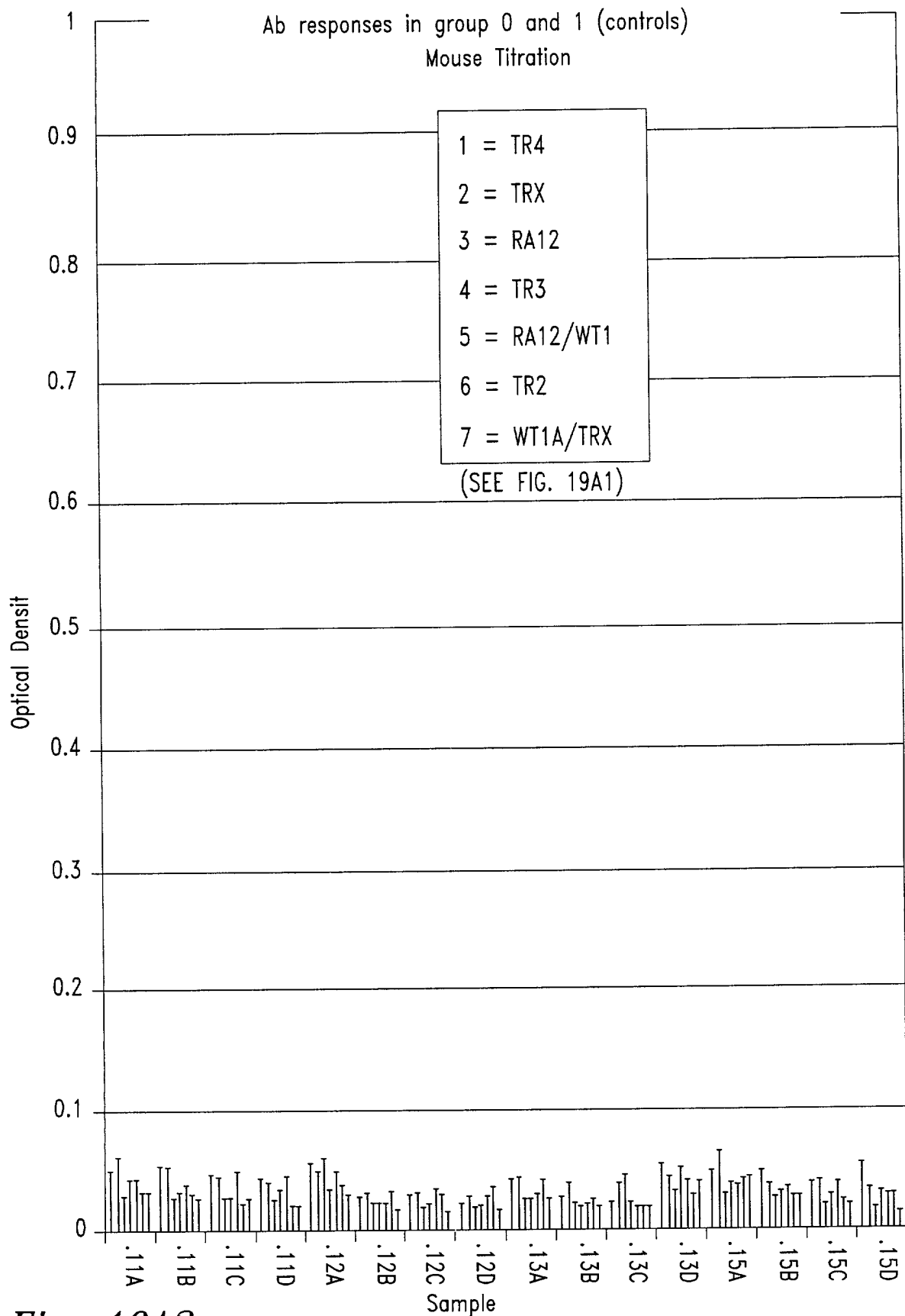


Fig. 19A2

Control groups. A: 1:500 Dilution, B: 1:2000, C: 1:8000, D: 1:16000

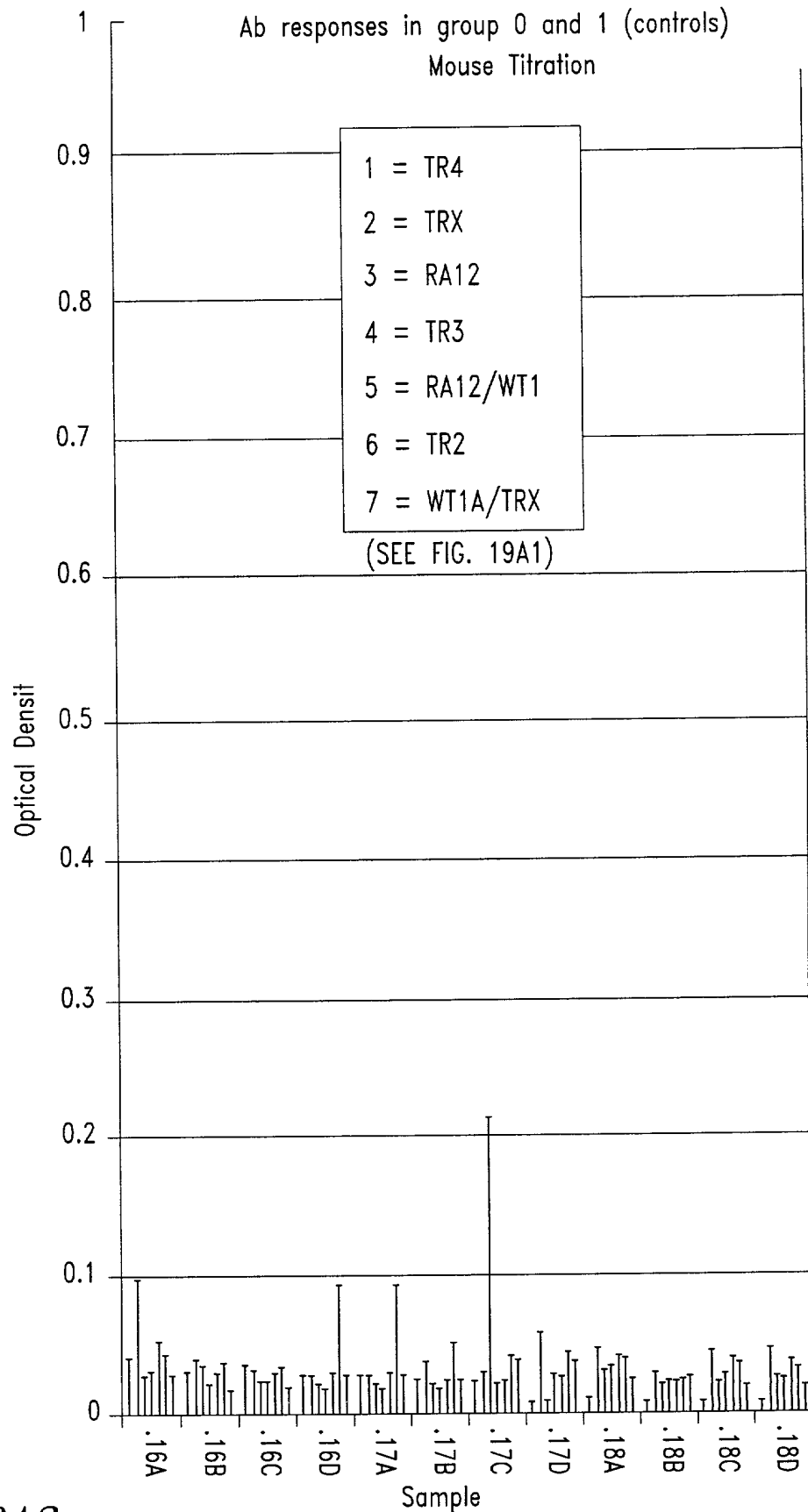


Fig. 19A3

Control groups. A: 1:500 Dilution, B: 1:2000, C: 1:8000, D: 1:16000

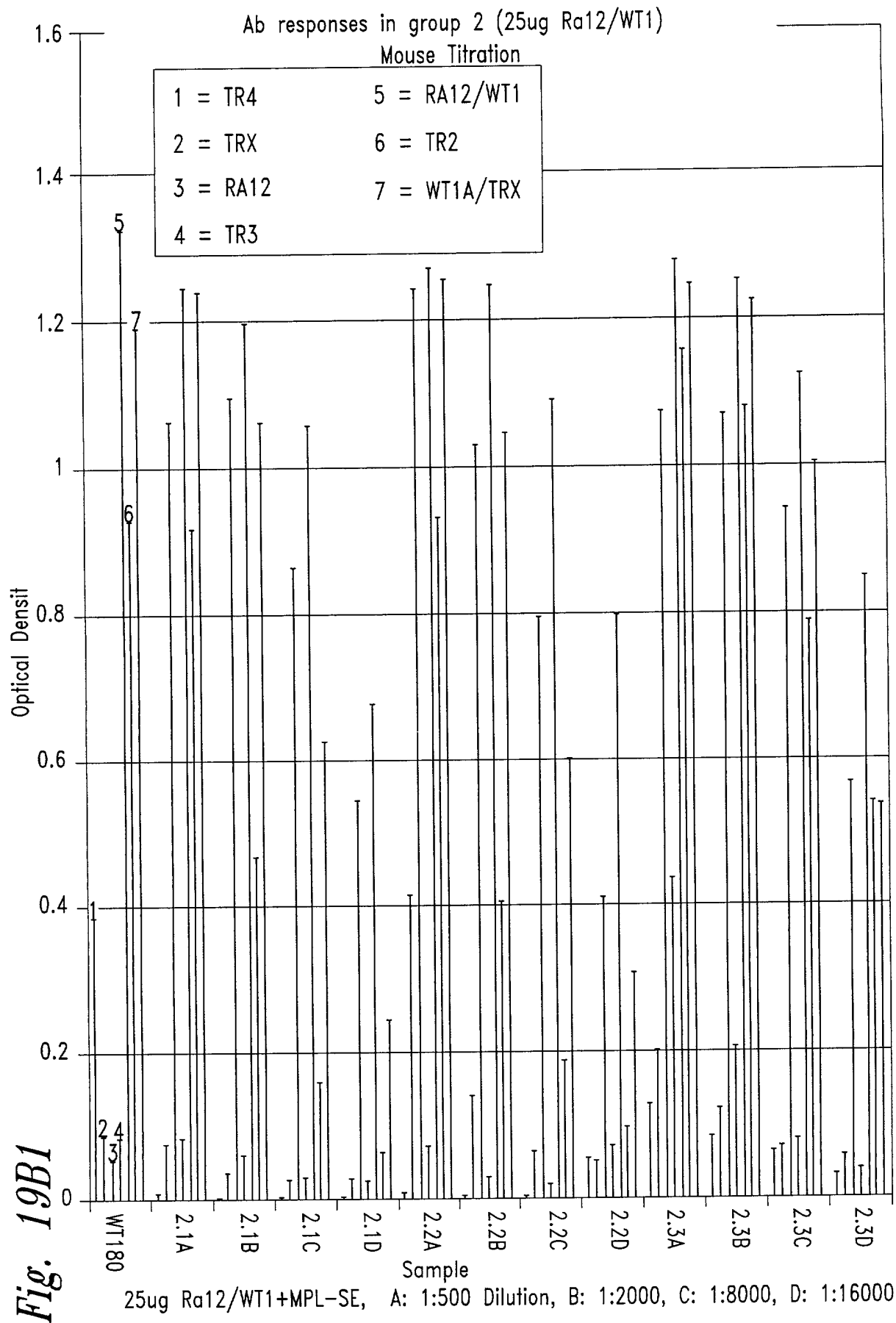


Fig. 19B1

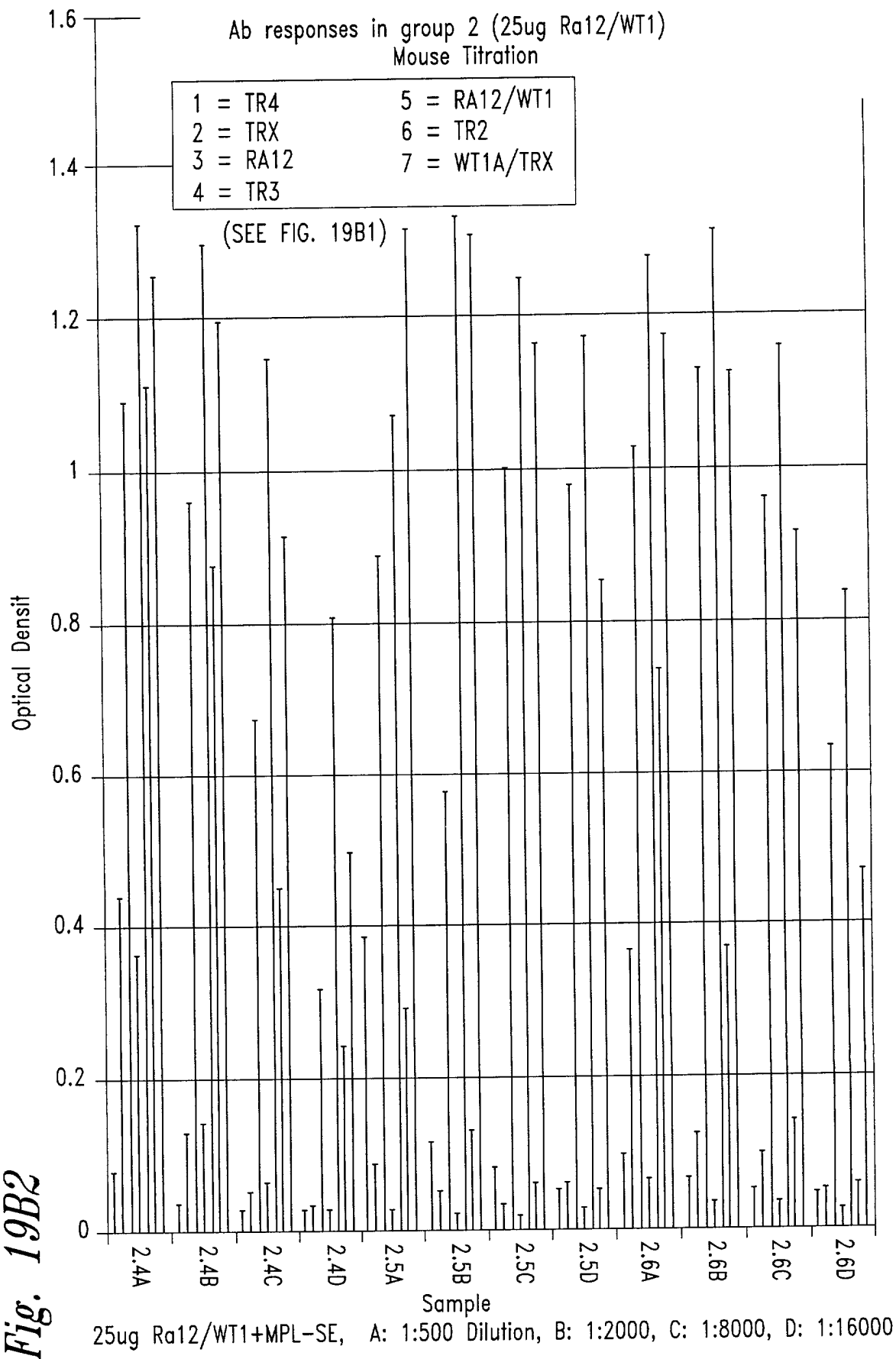


Fig. 19B2

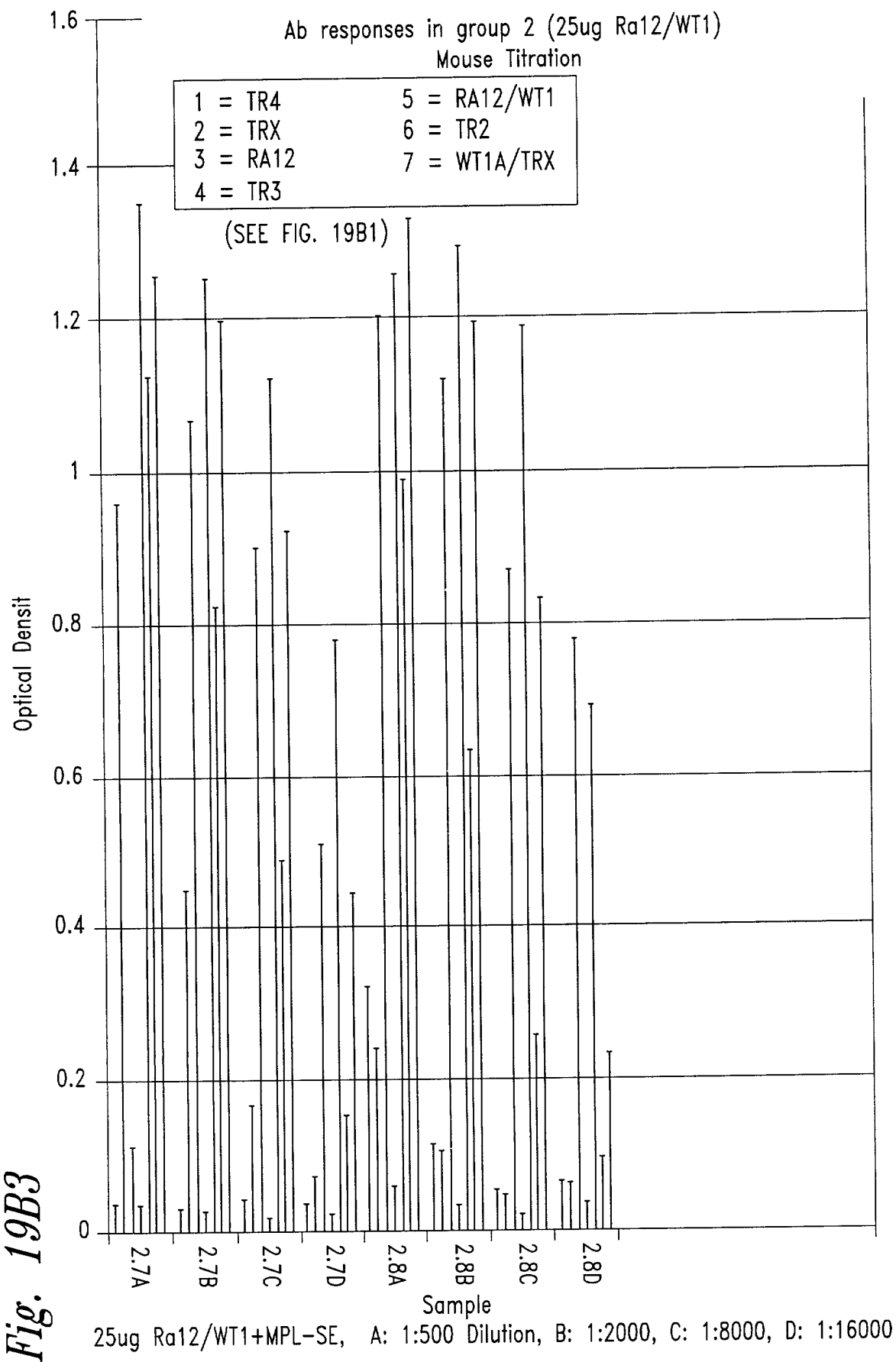


Fig. 19B3

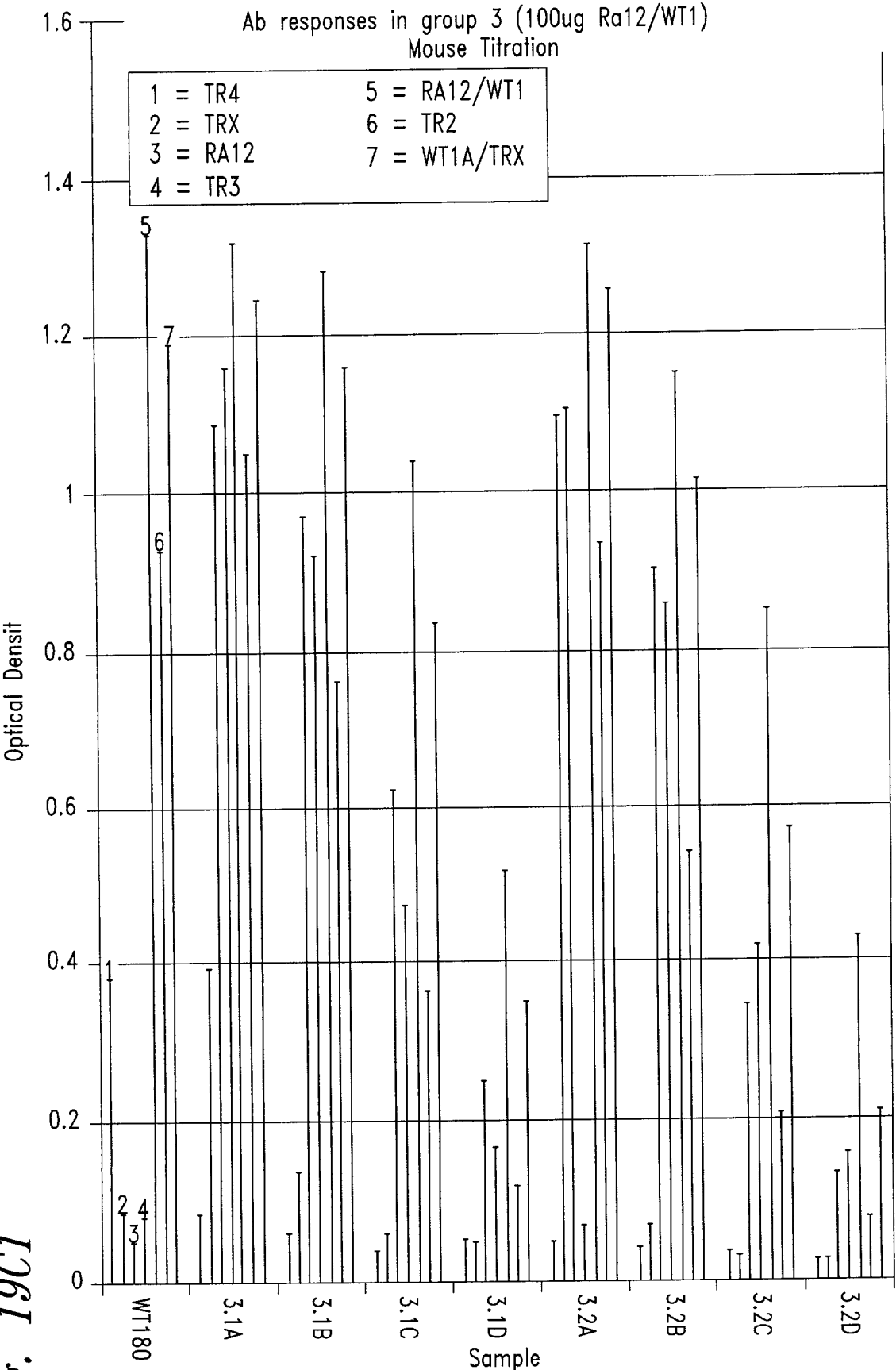


Fig. 19C1

WT1. Dose Titration. Ab responses to WT1. 100ug Ra12-WT1+MPL-SE.
A: 1:500 Dilution, B: 1:2000, C: 1:8000, D: 1:16000

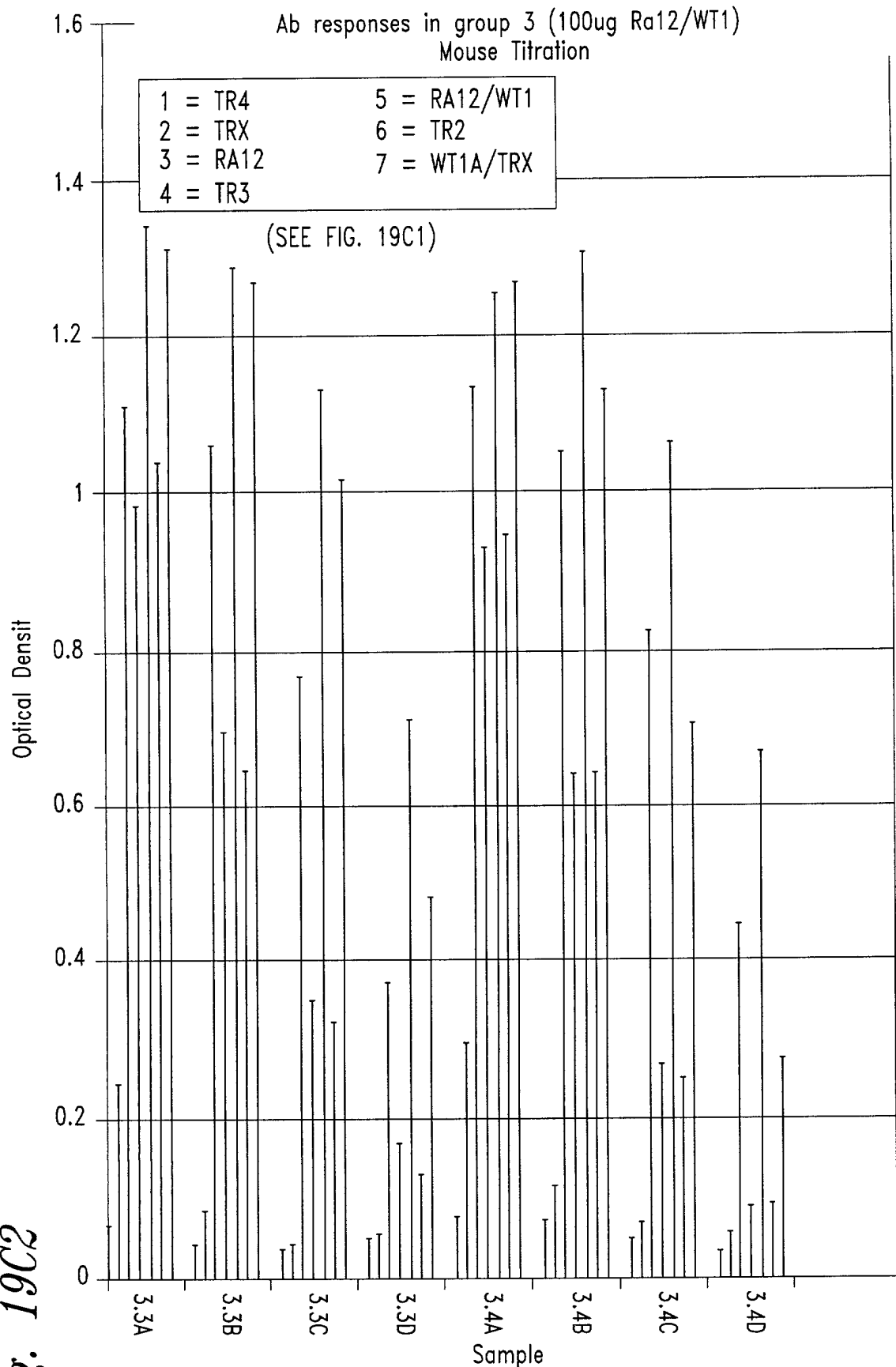


Fig. 19C2

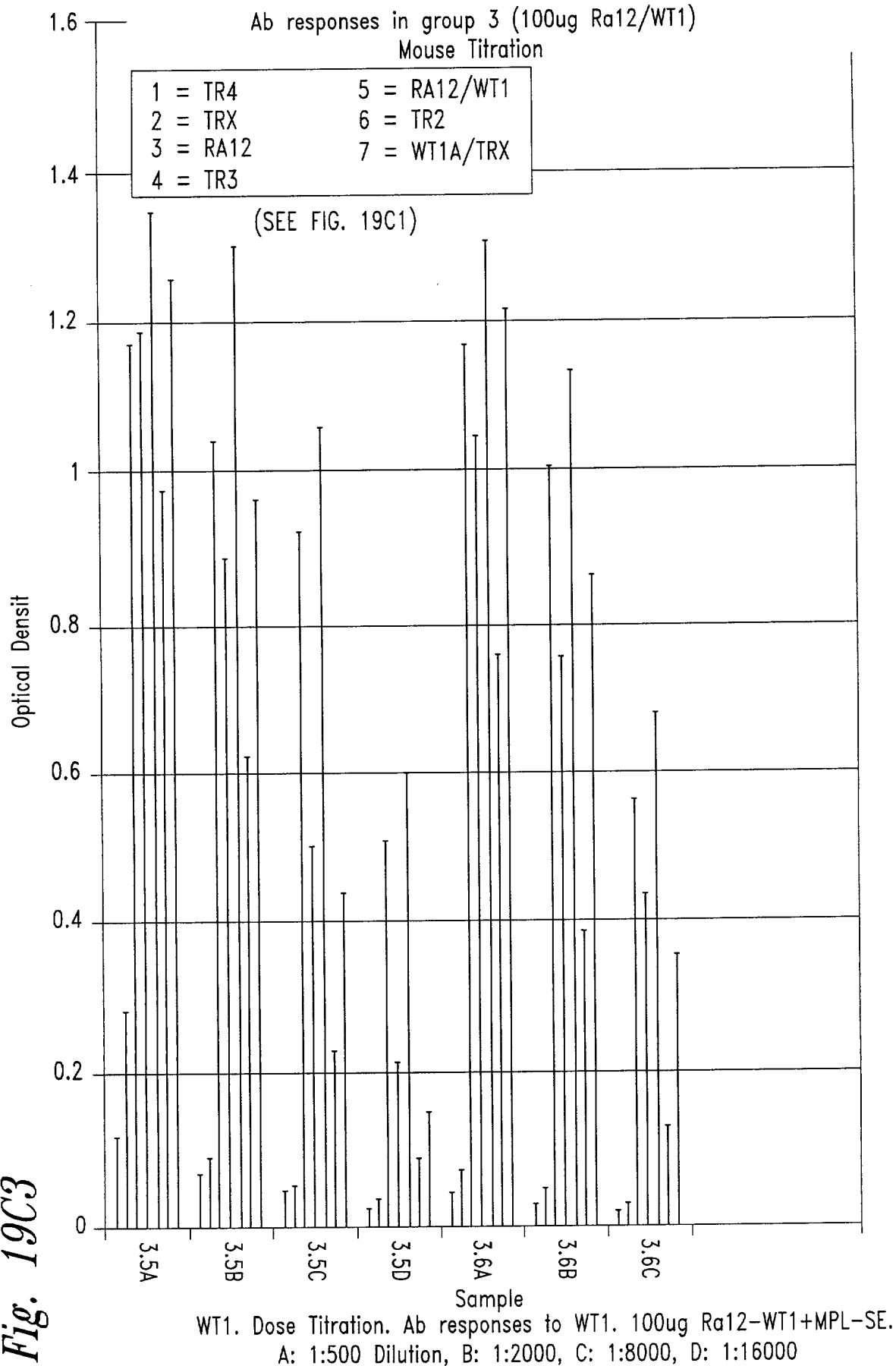


Fig. 19C3

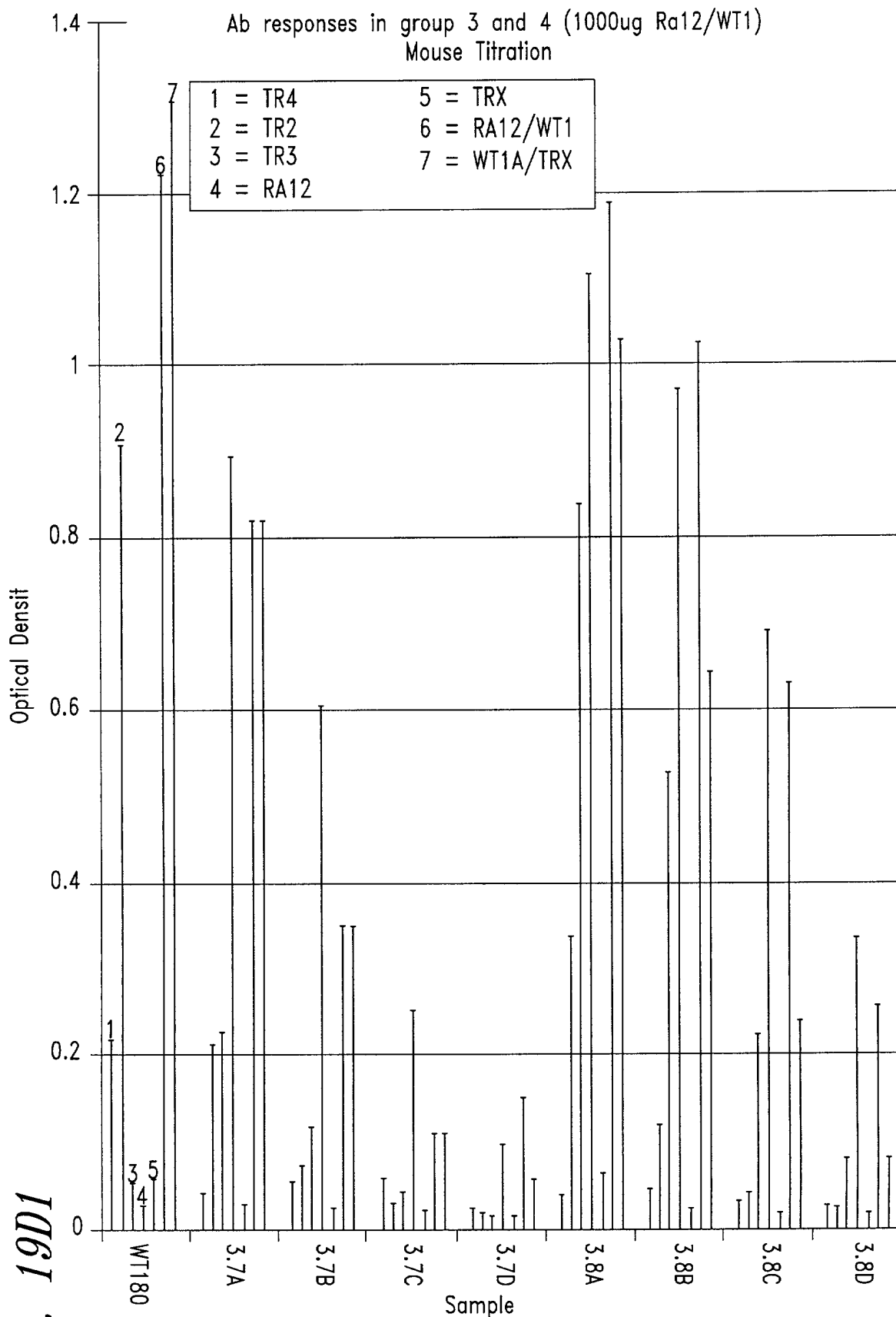


Fig. 19D1

WT1. Dose Titration. Ab responses to WT1. 1000ug Ra12-WT1+MPL-SE.
 A: 1:500 Dilution, B: 1:2000, C: 1:8000, D: 1:16000

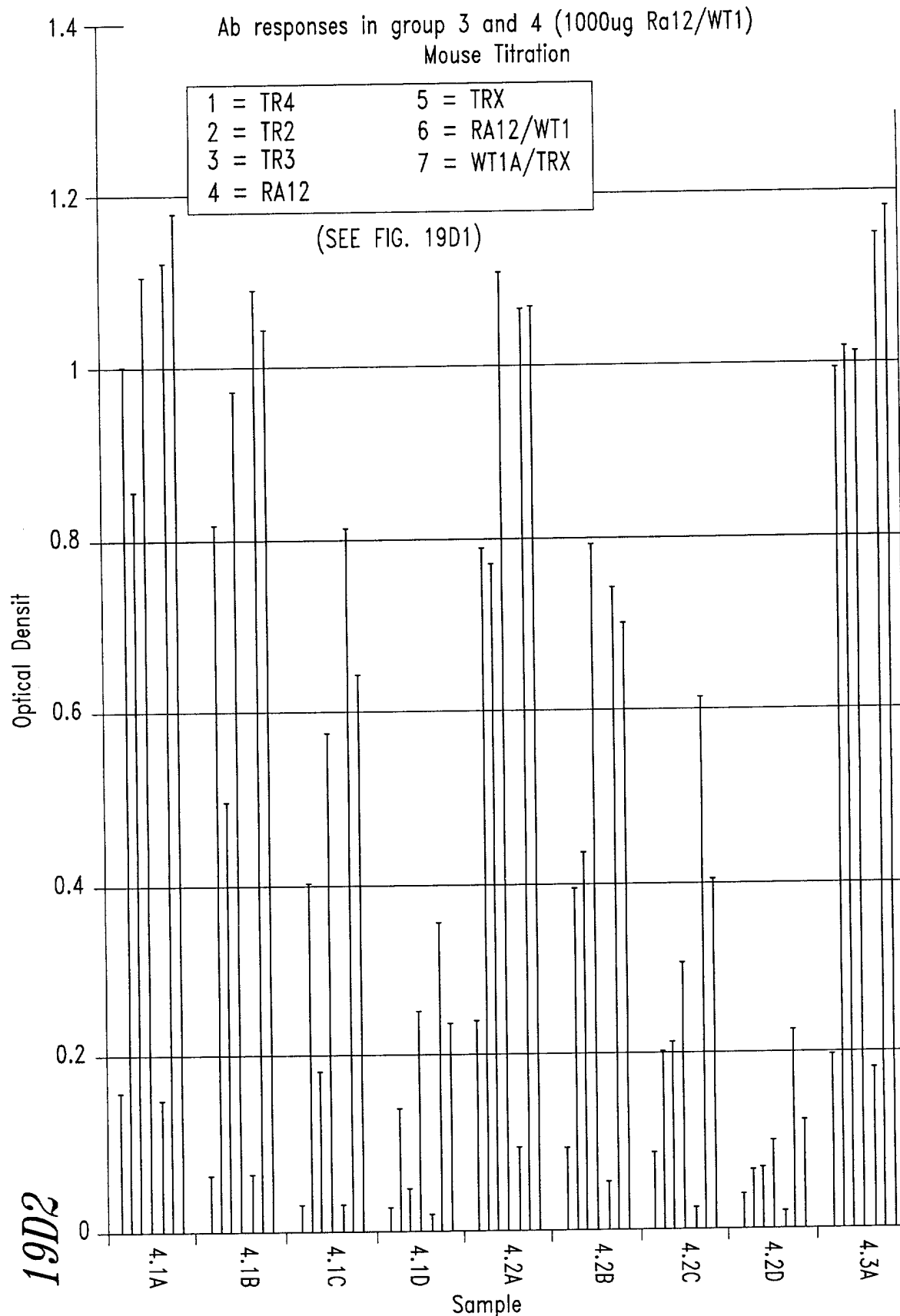


Fig. 19D2

WT1. Dose Titration. Ab responses to WT1. 1000ug Ra12-WT1+MPL-SE.
 A: 1:500 Dilution, B: 1:2000, C: 1:8000, D: 1:16000

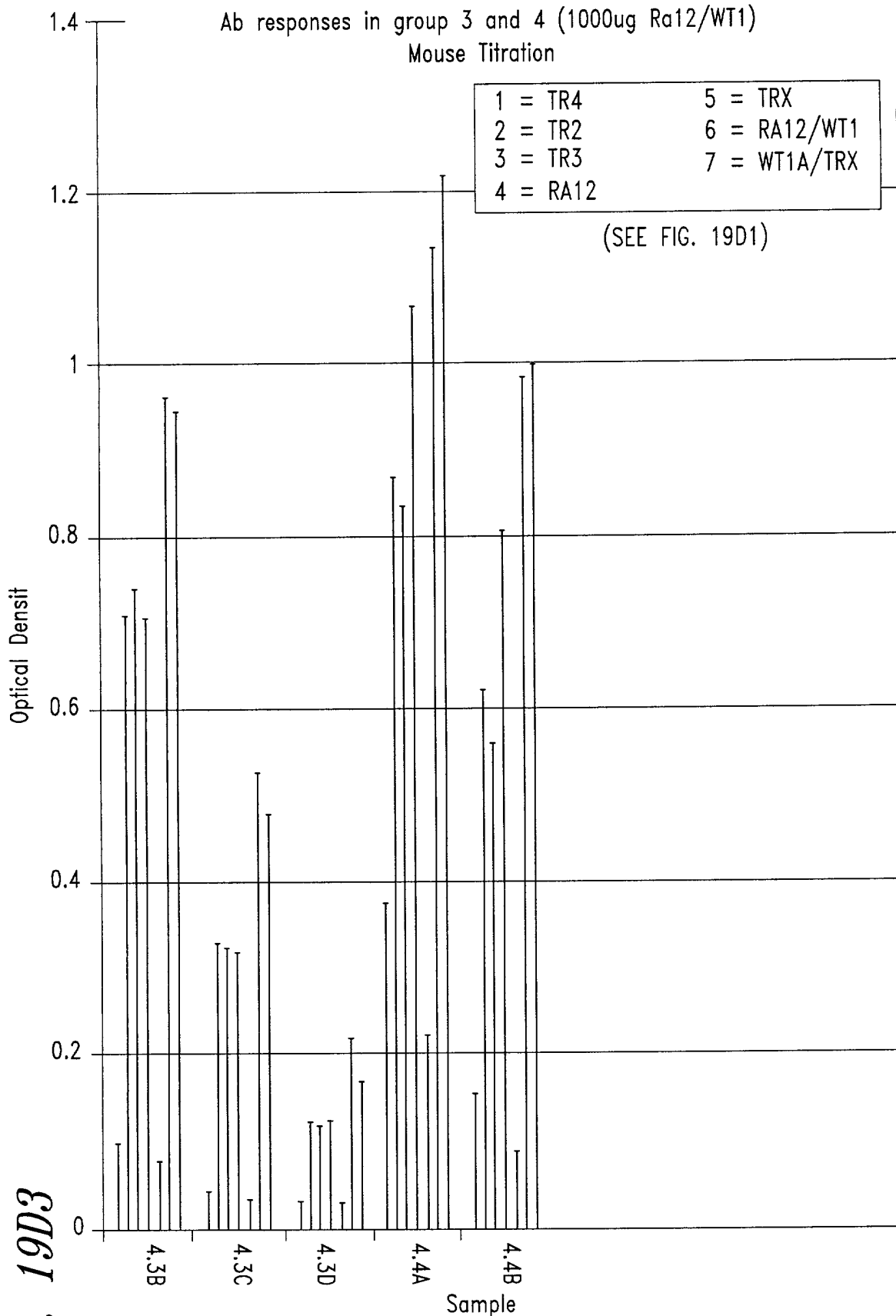


Fig. 19D3

WT1. Dose Titration. Ab responses to WT1. 1000ug Ra12-WT1+MPL-SE.
 A: 1:500 Dilution, B: 1:2000, C: 1:8000, D: 1:16000

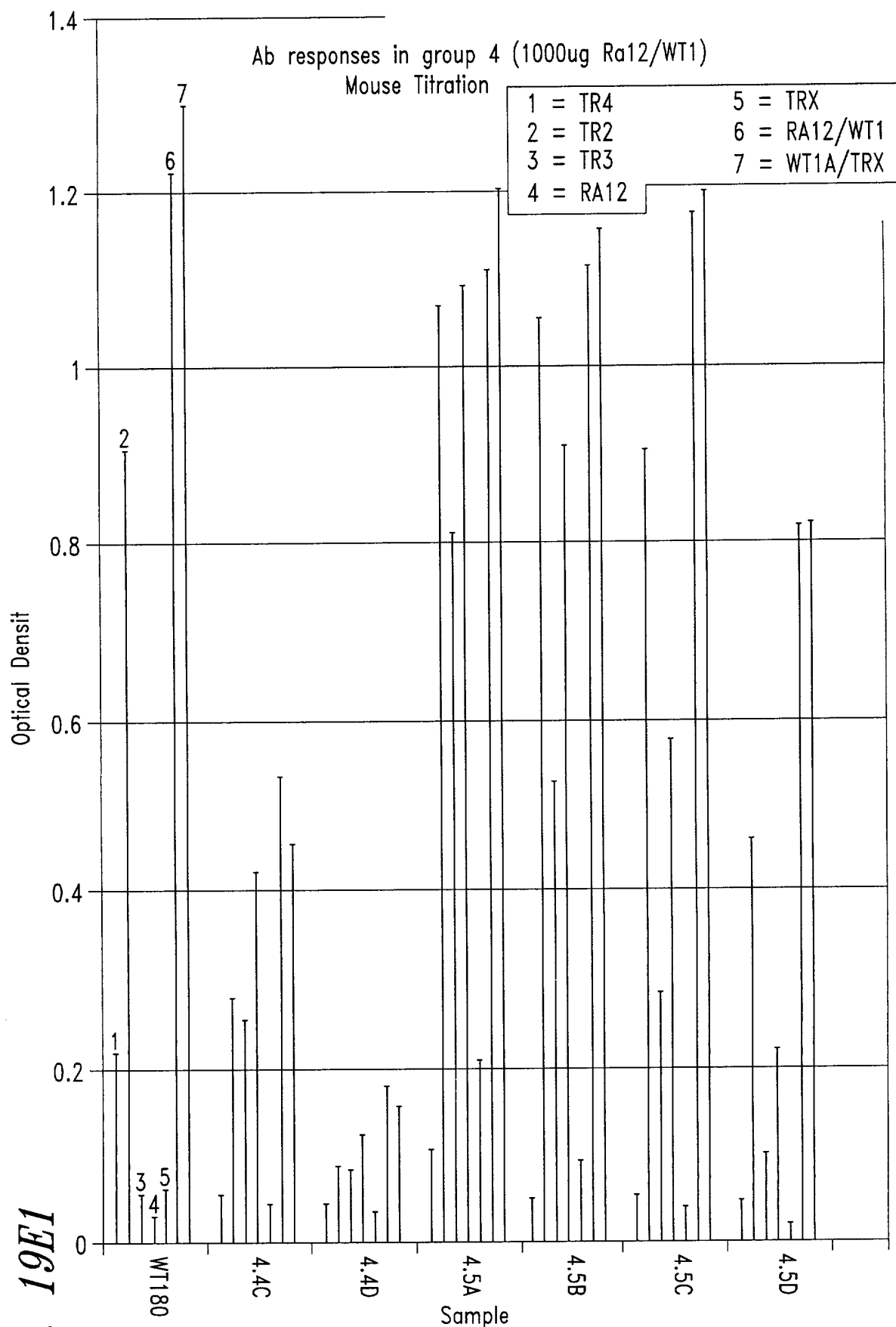


Fig. 19E1

WT1. Dose Titration. Ab responses to WT1. 1000ug Ra12-WT1+MPL-SE.
 A: 1:500 Dilution, B: 1:2000, C: 1:8000, D: 1:16000

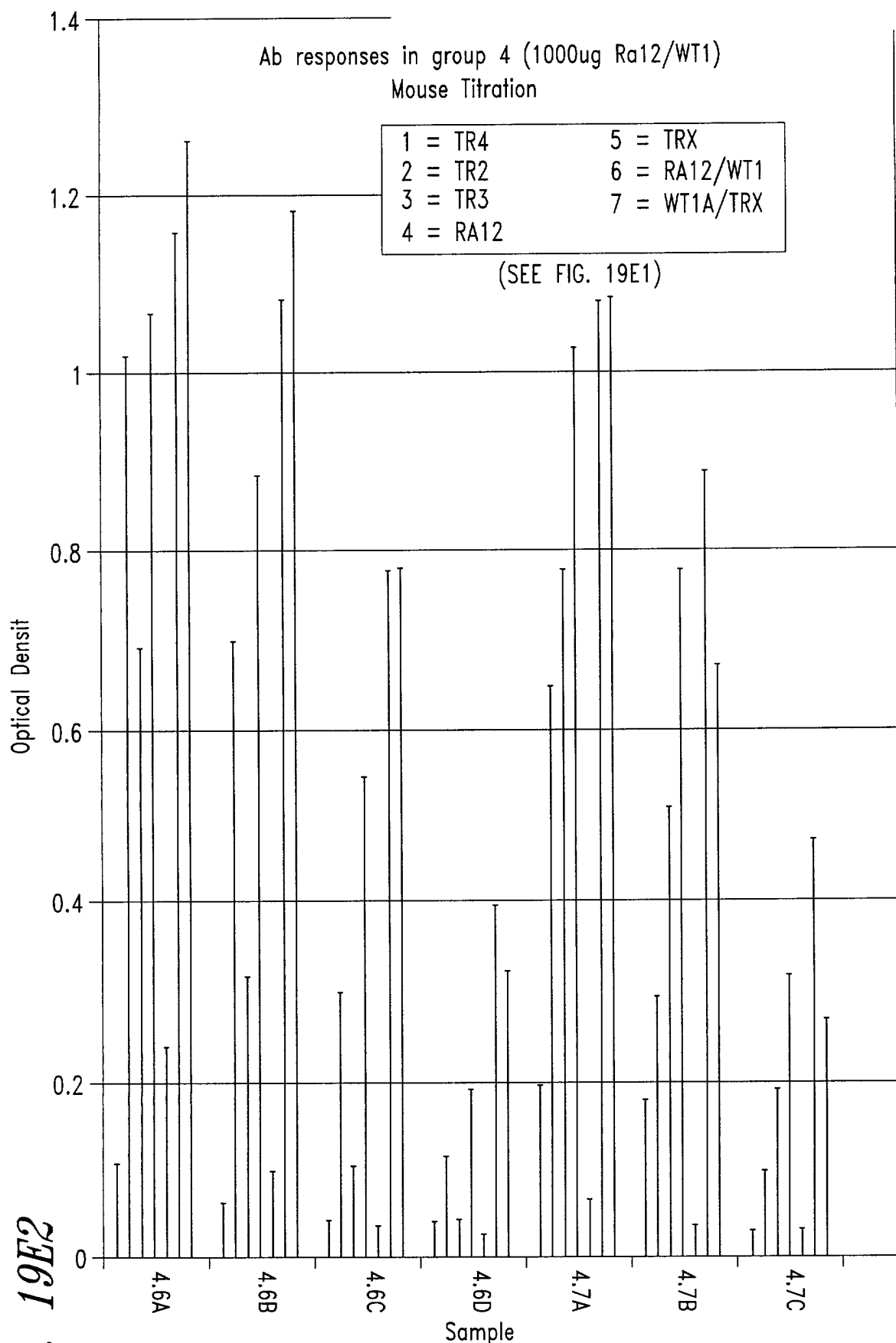


Fig. 19E2

WT1. Dose Titration. Ab responses to WT1. 1000ug Ra12-WT1+MPL-SE.
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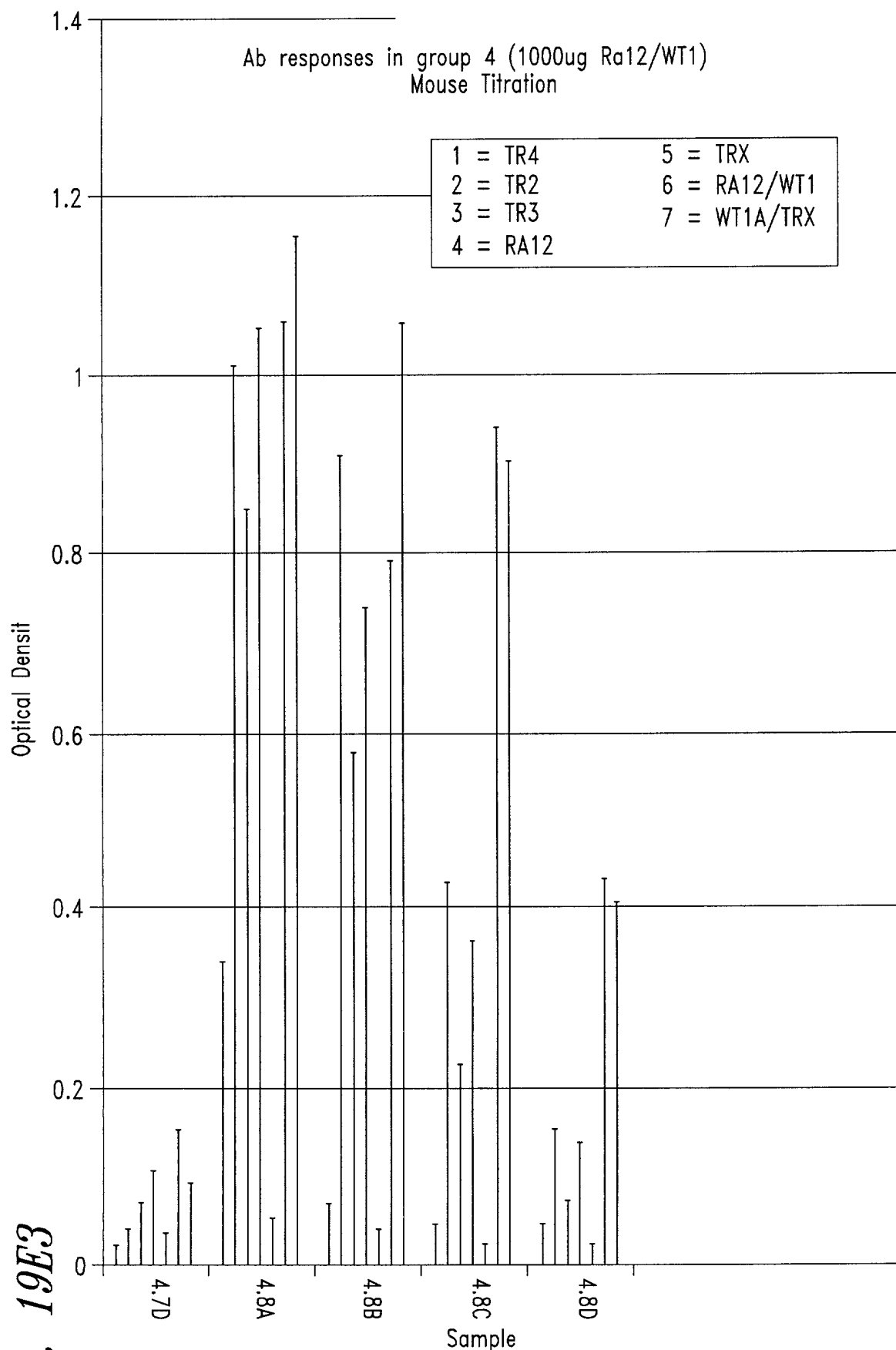


Fig. 19E3

WT1. Dose Titration. Ab responses to WT1. 1000ug Ra12-WT1+MPL-SE.
 A: 1:500 Dilution, B: 1:2000, C: 1:8000, D: 1:16000

FIG. 20A

Proliferative T-cell responses in WT1 protein immunized mice. (Ra12WT1 dose titration, 3x in vivo, after 2IVS)

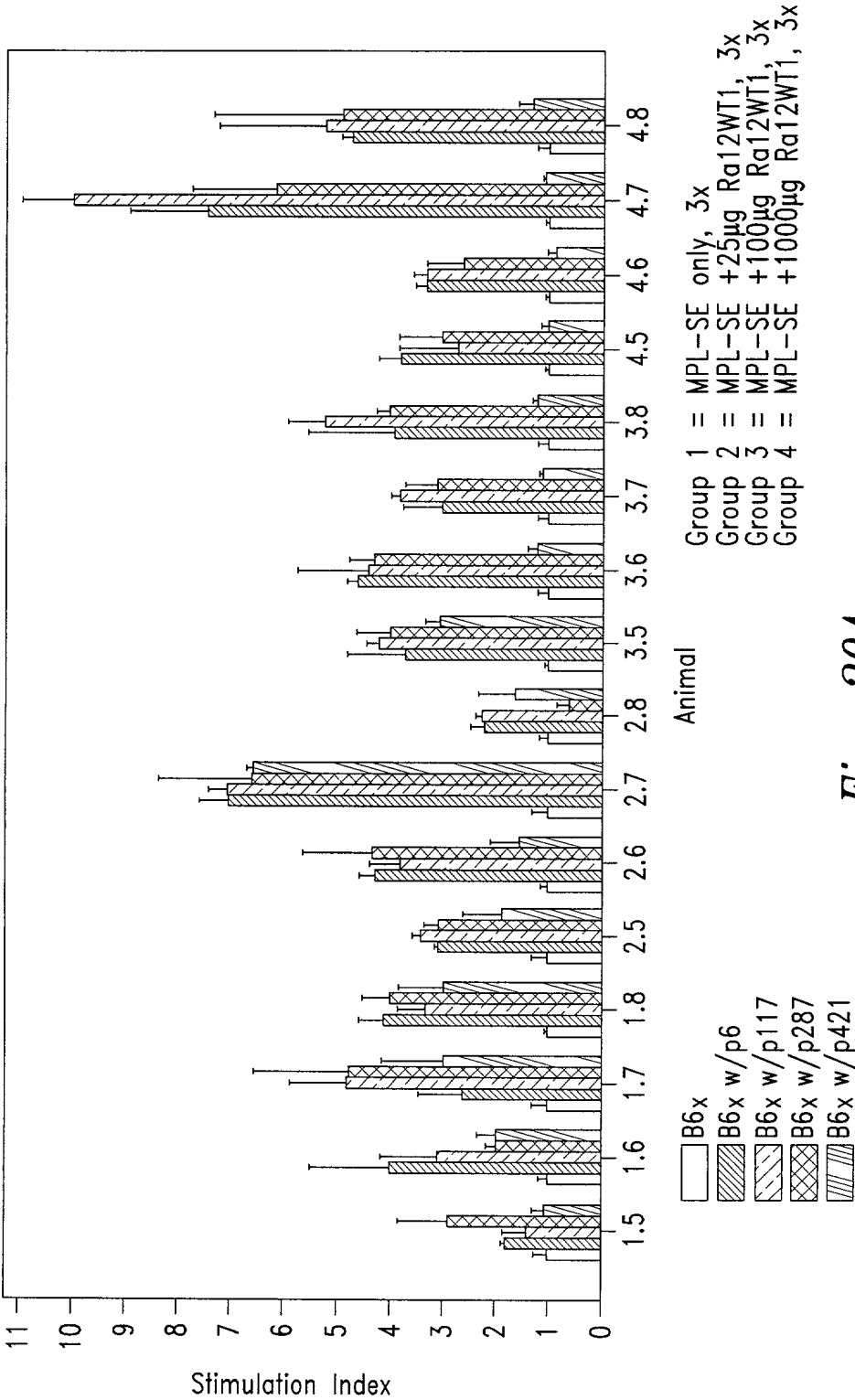


Fig. 20A

Proliferative T-cell responses in WT1 protein immunized mice. (Ra12WT1 dose titration, 6x in vivo, after 2IVS)

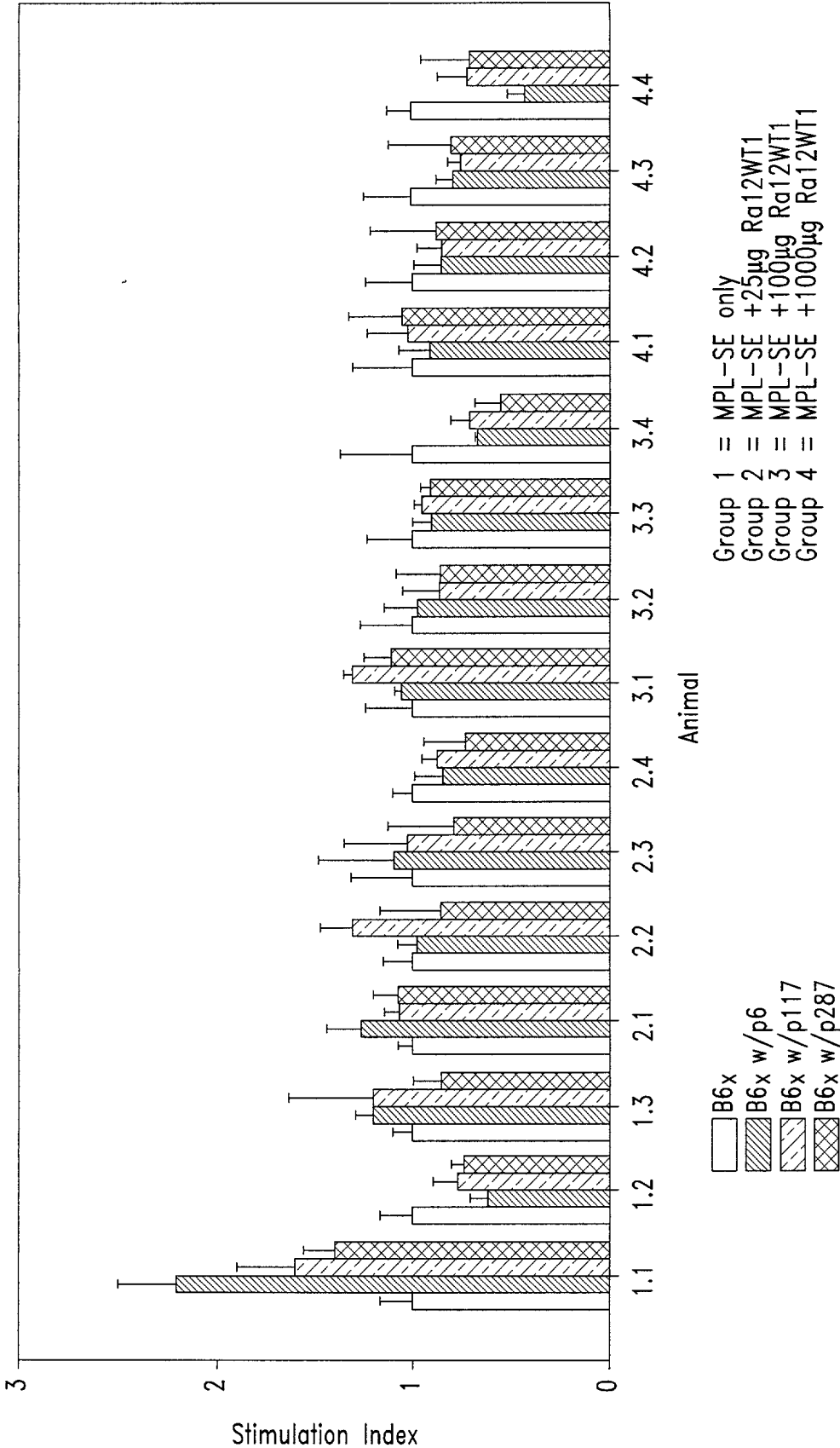
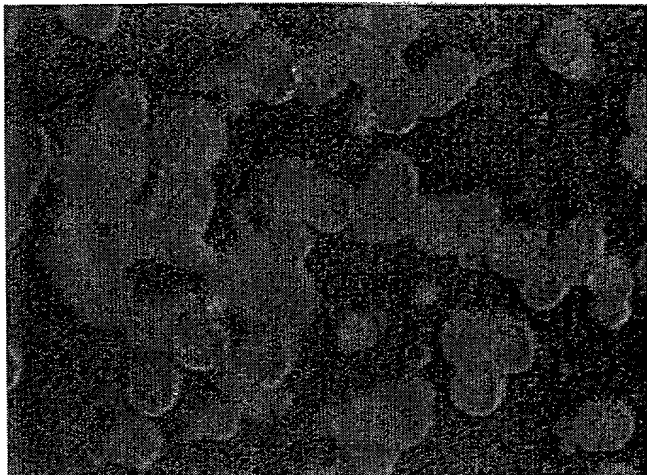


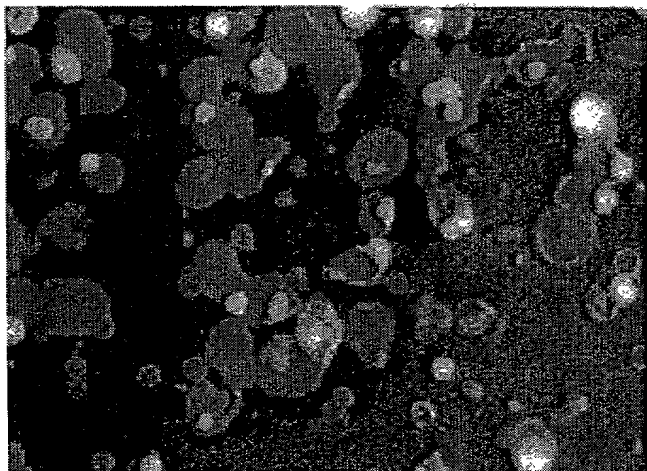
Fig. 20B

WT1 expression in human DC following adeno
WT1 and Vaccinia WT1 infection

Control
(uninfected human DC)



Adeno WT1
(infected human DC)



Vaccinia WT1
(infected human DC)

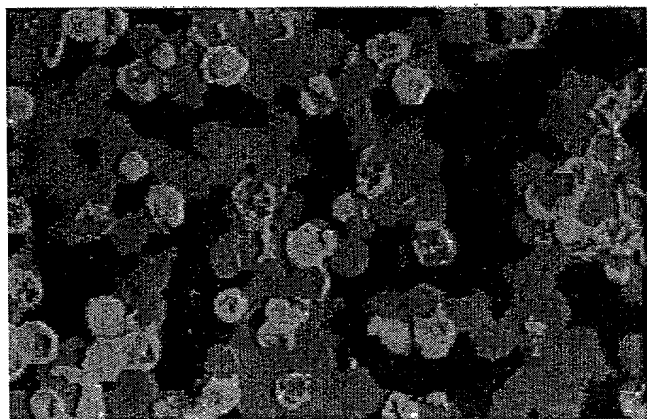
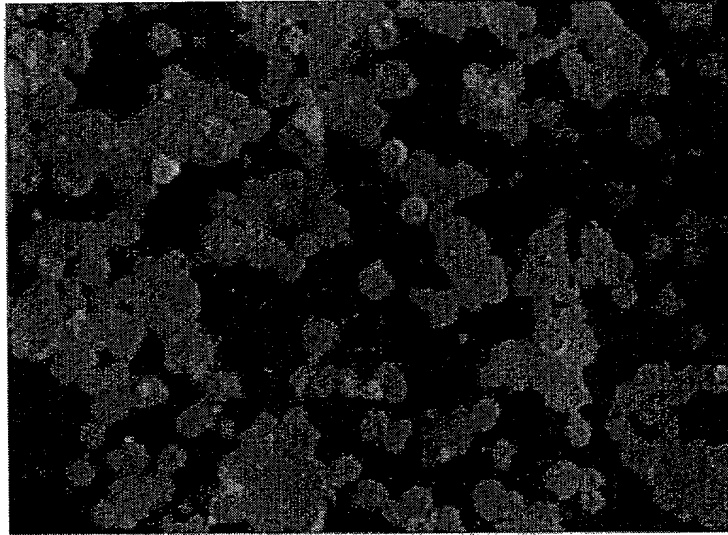


Fig. 21

WT1 can be expressed reproducibly in human DC
following adeno WT1 infection and is not
induced by a control Adeno infection

Control
(Adeno EGFP
infected human DC)



Vaccinia WT1
(infected human
DC)

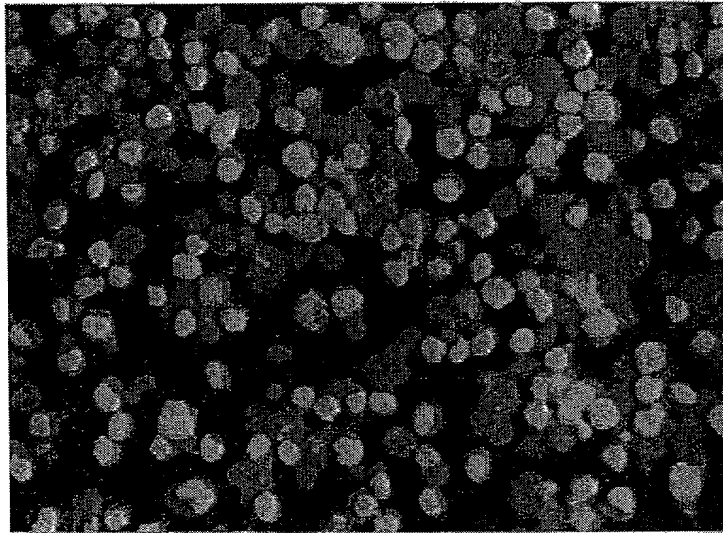


Fig. 22

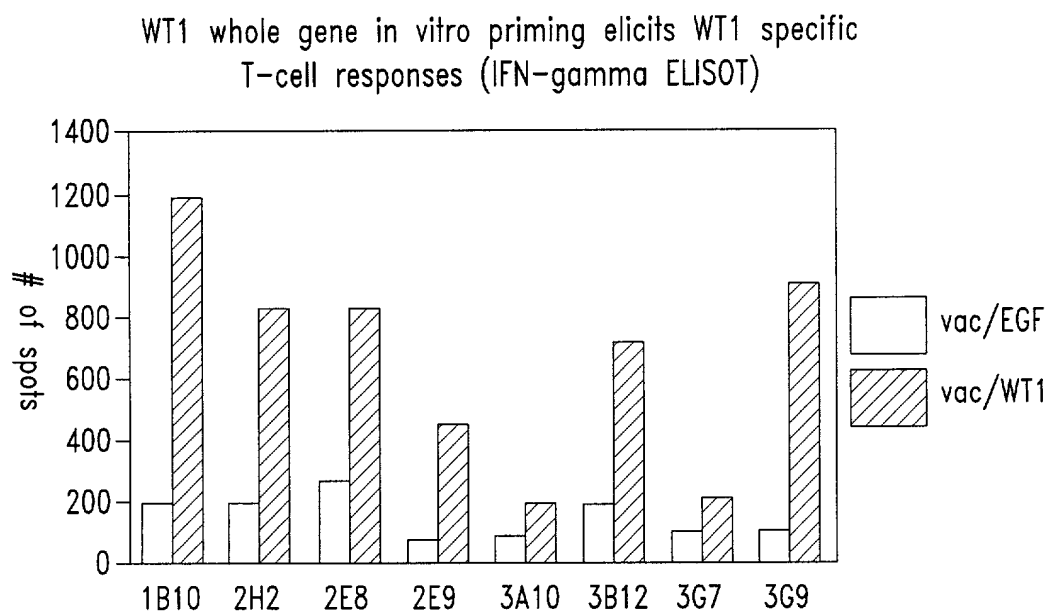


Fig. 23